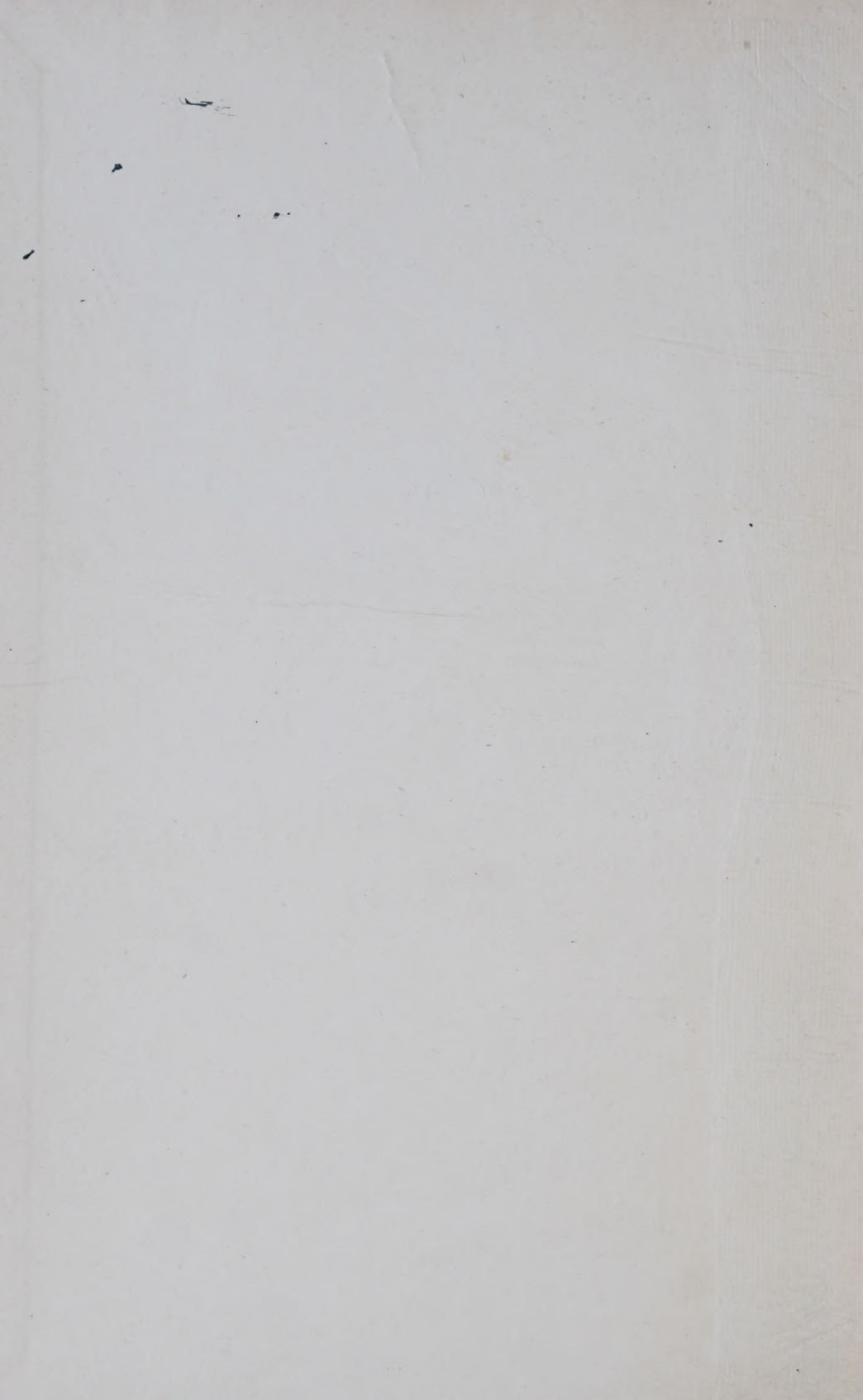




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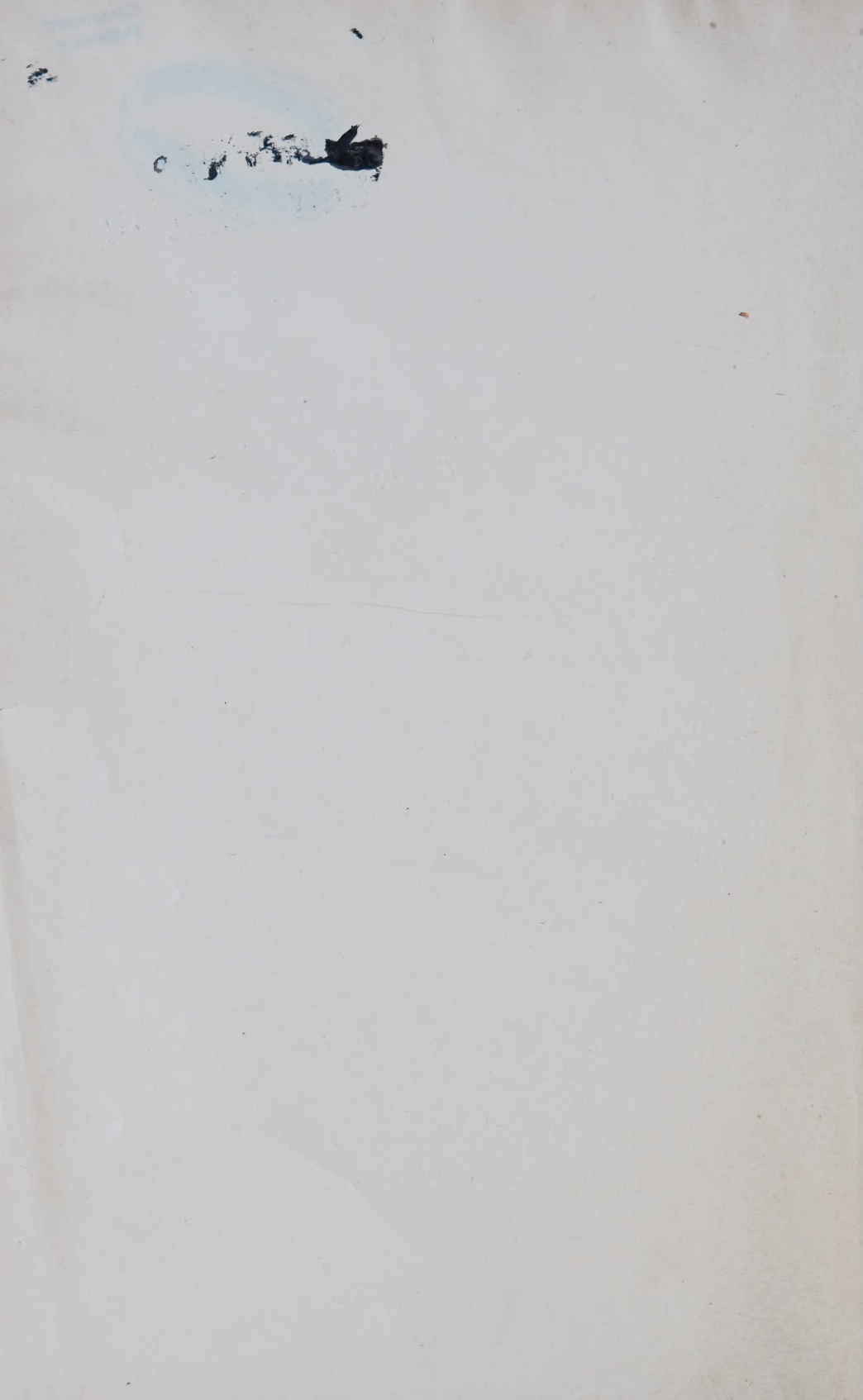


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1-2 EDWARD VII.

SESSIONAL PAPER No. 22

1934  
A. 1902

*Canada*

THIRTY-FOURTH ANNUAL REPORT

Government  
Publication

OF THE

DEPARTMENT OF MARINE AND FISHERIES

1901

FISHERIES

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1902

[No. 22—1902]





*To His Excellency the Right Honourable SIR GILBERT JOHN ELLIOT, EARL OF MINTO,  
Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY :


I have the honour to submit herewith, for the information of Your Excellency and the Legislature of Canada, the Thirty-Fourth Annual Report of the Department of Marine and Fisheries, Fisheries Branch.

I have the honour to be,

Your Excellency's most obedient servant,

JAMES SUTHERLAND,  
*Minister of Marine and Fisheries.*

DEPARTMENT OF MARINE AND FISHERIES,  
OTTAWA, January 22, 1902



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1901.

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# REPORT

## OF THE

### DEPUTY MINISTER.

To the Honourable

JAMES SUTHERLAND,

Minister of Marine and Fisheries.

SIR,—I have the honour to submit the annual report upon the transactions of the Fisheries branch of the Marine and Fisheries Department, embracing the fiscal year ending on June 30 last. That part of the report with reference to Fish Culture, Oyster Culture, Bait Cold Storage, Fisheries Protection Service, Intelligence Bureau and Behring Sea, comprises the whole calendar year 1901, while the Fishing Bounties and statistics of fisheries, as usual, cover only the previous year. However, the preliminary reports of our various inspectors give a fair idea of the fishing operations and the state of the fisheries in the different provinces for the year just closed.

No change has taken place since my last report, respecting the system of fishery protection between the Federal and Provincial authorities, as defined in the judgment of the Lords of the Judicial Committee of the Privy Council in May, 1898.

Special reports by Professor E. E. Prince, Commissioner of Fisheries, treating of:—

1. The Protection and Planting of Predaceous Fish ;
2. The Aim and Basis of Fishery Regulations ; will be published as a supplement to this report.

The Commissioner also publishes as Appendix 12, his usual report on Fish Culture operations during the season 1901.

#### MARINE BIOLOGICAL STATION.

After carrying on its work for two years at St. Andrews, N.B., the Marine Biological Station was moved to Canso, N.S., early during the season, and the staff have been engaged in important fishery and scientific investigations at that great centre of the maritime fishing industries.

The Board of Management, at their annual meeting in Ottawa, in January, decided that as the researches commenced in Passamaquoddy Bay had been carried to a fair state of completion, it was in the public interest that other urgent fishery problems, on some part of the coast further north, should engage the attention of the scientific staff.

There were many reasons for locating at Canso during the present year (1901). Not only is it the centre of considerable and varied fishing industries, and affording therefore unusual facilities for securing abundance of interesting and valuable material for study; but it forms, as it were, a connecting link between the fishing industries and the marine fauna of the southern waters of the Dominion, as found in Passamaquoddy Bay, and the more northerly fisheries and fauna of the Gulf of St. Lawrence proper.

The staff have had every reason to be satisfied with the decision reached by the Board. It was a somewhat perilous task to tow the station, placed upon its capacious scow, from St. Andrews, across the Bay of Fundy and up the coast of western Nova Scotia to the Strait of Canso. Commander Spain, when the matter was brought before him, most willingly agreed to do anything in his power to ensure the safe conveyance of the floating station from the New Brunswick location to the proposed site on the coast of eastern Nova Scotia. It was, however, a somewhat hazardous undertaking, as the distance is much greater than the station is ever likely to traverse at a single trip again, and the exposed nature of the coast and the unfavourable time of the year (early spring), combined to make it a notable excursion for a craft not built for long voyages. Thanks to the skill and characteristic energy of Capt. J. H. Pratt, of the Dominion cruiser, *Curlew*, to whom Commander Spain committed the task of towing the station, the trip was completed with safety, and on arrival at Canso was at once beached and placed in position at the east end of the town of Canso.

For nearly five months continuous investigation was carried on, the whole of the laboratory tables being at one time or other occupied by investigators of scientific standing and repute. A new beam trawl was tried on several occasions in Chedabucto bay by the kind assistance of the Messrs. Whitman & Co., who allowed their steam tug to be utilized on these and on other occasions during the summer. Tow-netting was also actively carried on in the waters adjacent to the station, and dredging, line fishing and other methods of testing the neighbouring sea and of procuring specimens for study were adopted. The experiments with dynamite, intended to show accurately what the effect of the explosive is upon schools of fish, and other important lines of work were actively pursued, and a most valuable and interesting summer's work was accomplished, upon which detailed reports will, in due course, be presented.

Professor Prince, the director, spent some weeks at the station continuing some special researches commenced the previous year, but the main part of the summer's work was superintended and personally carried on by the assistant director, Professor Ramsay Wright, who spent the whole of the season at the station. Dr. Stafford again undertook the duties of curator, and with unremitting zeal aided the workers, and at the same time pursued special investigations.

During the season the tables were occupied and work carried on at sea or upon shore by the following staff: Professor Ramsay Wright, Professor A. P. Knight, Professor A. B. Macallum, Professor Fowler, Dr. Joseph Stafford, Mr. C. McLean-Fraser, Mr. Geo. A. Cornish and Dr. Linville, of New York, and as already stated, Professor Prince, Commissioner of Fisheries, conducted some fishery investigations at the station.

Valuable additions to the equipment of the station were made, and the library received a fine series of scientific memoirs and papers, procured from Germany through Professor Wright. The station, now that it is in full and active operation, finds itself

## SESSIONAL PAPER No. 22

somewhat cramped by its limited means, but the printed series of papers recently issued, dealing with fishery and marine biological subjects, will indicate the varied and substantial character of the work accomplished in this promising domicile of science. During the season, the staff were continually indebted for ready advice and practical help to the Messrs. Whitman & Co., of Canso. To Mr. Edward Whitman especially, as also Mr. Clem. Whitman, the station owes much of the success which has attended its work at Canso during the season of 1901, and the season of 1902 at the same place promises to be of increased interest and importance.

## THE BEHRING SEA QUESTION AND PELAGIC SEALING.

This question being still within the scope of the Joint High Commission for the consideration of points of difference between Canada and the United States, and therefore being for the time removed from the ordinary channel of diplomatic correspondence, no change has taken place in its standing as an international issue.

The industry is still proceeding under the regulations reached by the award of the arbitrators at Paris in 1893.

The sealing fleet during 1901 aggregated 39 vessels, representing 2,791 tons register. The crews comprised 443 whitemen and 465 Indians, employing 139 boats and 226 canoes.

These 39 vessels were so distributed at different times during the season that 37 of them participated in the North American coast fishery, 26 in the Behring Sea fishery, 8 in the Japanese coast fishery, and 8 in the vicinity of the Russian seal islands.

The catch is divided as follows ;—

North American coast, including Indians coast catch.....	8,533
Japan coast.....	2,130
Vicinity of Russian islands.....	3,397
Behring Sea.....	10,362
Total.....	24,422

Although the catch is comparatively small, the sealers report that the seals do not appear to be any scarcer, but it is more difficult to approach them than in former years.

The quality of the skins secured was generally good and they were sold at the annual sale in London to advantage, the amount realized from the skins sent to the British market being about \$350,000.

It is noticeable that the sealers are again exploiting the waters of the Asiatic side of the North Pacific Ocean on the Japan coast and in the vicinity of the Russian Seal Islands, a branch of the seal fishery which during the past few years had been practically abandoned.

No complaints have been made of any violations or transgressions of the law by the sealers this year, and no complications have arisen.

It is also gratifying to be able to state that there has been an absence of disaster to the sealing fleet, and no loss of life has been reported.



## ARBITRATION OF SEIZURES OF SEALING VESSELS BY RUSSIA IN 1892.

There is no change in the position of this question, and although it has continued to form the subject of diplomatic correspondence no agreement has yet been reached as to the precise terms of reference of the claims to the arbitrator.

## GENERAL STATISTICS OF FISHERIES.

## EXPENDITURE AND REVENUE.

The details of the total expenditure for the different fisheries services during the last fiscal year amounting to \$491,569, form the first appendix of this report. This amount comprises, fisheries proper, \$111,760; fish-culture, \$68,961; fisheries protection service, \$124,211; miscellaneous expenses, \$27,833, and the \$158,802 distributed as fishing bounties.

The total sum received during the same period as revenue from fishery licenses, fines, &c., in the different provinces is given at \$88,145, including the *modus vivendi* licenses granted to the United States fishing vessels (\$98,178).

A comparative statement of all expenditure and revenue for the last fourteen years concludes this appendix.

## FISHING BOUNTIES.

For the season of 1900, the sum of \$158,802 was paid as fishing bounties to the deep sea fishermen of the Maritime provinces. Of this amount \$68,721 was divided amongst the crews of 802 fishing schooners and the balance shared by 22,031 boat fishermen. These different amounts entailed the payment of 13,776 claims.

For the last year, Nova Scotia received about two-thirds of the bounty fund, amounting to \$101,448; Quebec, \$33,203; New Brunswick, \$13,562, and Prince Island \$10,589.

For the last nineteen years, the distribution of the fishing bounties to the deep-sea fishermen of the Maritime provinces would aggregate a sum of over \$3,000,000.

## EXTENT OF COAST.

The fisheries of Canada are the most extensive in the world comprising an immense sea-coast line, besides innumerable lakes and rivers. The eastern sea-coast of the Maritime provinces from Bay of Fundy to the Straits of Belle Isle exceeds 5,600 miles, while the western coast of British Columbia is given at 7,180 miles, that is more than double that of Great Britain and Ireland.

While the salt-water in-shore area, not including minor indentations, cover more than 1,500 square miles, the fresh water area of the part of the great lakes within Canada is reckoned at 72,700 square miles, not including the numerous lakes of Manitoba and the North-west Territories all stocked with excellent species of food fishes.

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## CAPITAL INVESTED IN THE FISHERIES OF CANADA AND NUMBER OF FISHERMEN.

The following table shows that over 80,000 men were engaged during the season of 1900 in our fishing industry, using boats, nets and other implements, aggregating a value of \$10,990,125. About 1,200 schooners, manned by over 9,200 sailors, besides 71,859 other fishermen, using 38,930 boats and 6,295,000 fathoms of nets, all found employment in this vast industry.

The lobster plant alone is valued at \$1,419,100, comprising 919 canneries, dispersed on the seaboard of the Maritime provinces. No less than 18,200 persons were engaged in this preserving branch of the industry.

The salmon canning industry of British Columbia in 1900, comprising seventy-one establishments, valued at \$1,420,000, gave employment to 19,787 persons.

The sealing fleet in the same province for the year 1900 consisted of 37 schooners, 114 boats and 316 canoes, valued at \$147,200, and manned by 1,052 sailors and hunters.

1-2 EDWARD VII., A. 1902

## RECAPITULATION.

Showing the value of Fishing Vessels, Boats, Nets, &amp;c., and of all Capital engaged in the Fishing Industry of Canada, 1900.

PROVINCE.	FISHERMEN IN		VESSELS.			BOATS.		GILL-NETS AND SEINES.		Value of pound and trap nets, weirs, trawls, lines, etc.	Value of Lobster plant.	Approximate value of freezers, ice and smoke houses, and other fixtures not itemized.	TOTAL VALUE.
	Vessels.	Boats.	Number.	Tonnage.	Value.	Number.	Value.	Fathoms.	Value.				
Nova Scotia . . . . .	5,816	19,396	557	26,064	947,640	14,766	302,219	1,878,574	556,196	246,483	656,508	569,577	3,278,623
New Brunswick . . . . .	1,080	11,559	299	4,058	135,100	7,050	257,752	1,104,181	750,609	325,686	367,170	524,770	2,361,087
Prince Edward Island . . . . .	99	4,895	19	750	13,850	2,330	64,167	106,980	35,482	19,316	268,450	40,855	442,120
Quebec . . . . .	160	12,937	29	982	18,000	1,483	195,131	327,638	167,573	138,269	126,976	184,920	830,869
Ontario . . . . .	420	2,082	491	1,339	232,589	1,187	66,317	1,901,576	247,116	173,456	..	49,564	789,042
British Columbia . . . . .	{ 1,032 475	19,787	{ +37 158	{ 2,641 3,956	{ 120,000 325,050	{ +430 5,113	{ 27,200 314,320	823,000	626,084	27,950	..	1,546,500	2,987,104
Manitola and N. W. Territories.	123	1,203	+22	1,523	128,100	571	21,065	153,392	22,800	300	..	129,015	301,280
Totals . . . . .	9,205	71,859	1,212	41,307	1,940,329	38,930	1,248,171	6,295,341	2,405,860	931,460	1,419,104	3,045,201	10,990,125

+ Fishing tugs.  
 ++ Sealing fleet with boats and canoes.  
 \$\$\$ Sailors and seal hunters.



## RECAPITULATION.

# STATEMENT of the Lobster Industry in Canada, 1900.

PROVINCES.	Number of Persons Employed.	PLANT.				CATCH.				Total Value of Catch.	
		Number of Canneries.	Value.	Number of Traps.	Value.	Total Value of Plant.	No. of 1-lb. Cans.	Value.	Fresh or Alive.		Value.
Nova Scotia . . . . .	6,447	277	225,785	698,972	430,723	636,508	5,263,780	1,052,754	169,195	845,975	1,898,729
New Brunswick . . . . .	5,440	237	144,460	246,861	222,710	367,170	2,038,692	407,738	19,729	98,645	506,383
Prince Edward Island . . . . .	3,184	246	103,805	302,117	164,645	268,450	2,223,712	444,742	135	675	445,417
Quebec . . . . .	3,134	159	50,676	134,985	76,300	126,976	1,022,106	204,421	80	400	204,821
Total . . . . .	18,205	919	524,726	1,382,935	894,378	1,419,104	10,548,290	2,109,655	189,139	945,695	3,055,350

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COMPARATIVE TABLE showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1879 to 1900.

Year.	VESSELS.			BOATS.		Value of Nets and Seines.	Value of other Fishing Material.	Total of Capital Invested.
	No.	Tonnage.	Value.	No.	Value.			
			\$		\$	\$	\$	\$
1879.....	1,183	43,873	1,714,917	25,616	854,289	988,698	456,617	4,014,521
1880... ..	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881.....	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882.....	1,140	42,845	1,749,717	26,747	833,137	1,351,193	823,938	4,757,985
1883.....	1,198	48,106	2,023,045	25,825	733,186	1,243,366	1,070,930	5,120,527
1884.....	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885... ..	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886.....	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,295
1887.....	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888.....	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889... ..	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890.....	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891.....	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186
1892.....	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,835
1893.....	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,557
1894.....	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,116
1895.....	1,121	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,848
1896.....	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,251
1897.....	1,184	40,679	1,701,239	37,693	1,128,682	1,955,304	4,585,569	9,370,794
1898.....	1,154	38,011	1,707,180	38,675	1,136,943	2,075,928	4,940,046	9,860,097
1899.....	1,178	38,508	1,716,973	38,538	1,195,856	2,162,876	5,074,135	10,149,840
1900... ..	1,212	41,307	1,940,329	38,930	1,248,171	2,405,860	5,395,765	10,990,125

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COMPARATIVE TABLE showing the number of men employed in the Fishing Industry since 1879.

Year.	Number of Persons in Lobster Canneries.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.	Total Number of Persons in Fishing Industry.
1879.....		8,818	52,577	61,395	
1880.....		8,757	51,900	60,657	
1881.....		8,359	50,679	59,056	
1882.....		8,498	52,785	61,283	
1883.....		9,966	52,259	62,225	
1884.....		9,968	51,854	61,822	
1885.....		9,539	53,282	62,821	
1886.....		8,927	53,073	62,000	
1887.....		8,911	55,247	64,158	
1888.....		9,574	53,109	62,683	
1889.....		9,621	55,382	65,003	
1890.....		8,726	55,000	63,726	
1891.....		8,666	56,909	65,575	
1892.....		8,330	55,348	63,678	
1893.....		8,899	58,854	67,753	
1894.....		9,525	61,194	70,719	
1895.....	13,030	9,804	61,530	71,334	84,364
1896.....	14,175	9,735	65,502	75,237	89,412
1897.....	15,165	8,879	70,080	78,959	94,124
1898.....	16,548	8,657	72,877	81,534	98,082
1899.....	18,708	8,970	70,893	79,893	98,601
1900.....	18,205	9,205	71,859	81,064	99,269

## VALUE OF THE FISHERIES.

The total value of the catch of fish in Canada for the year 1900 amounts to \$21,557,639, being a decrease of \$334,067 as compared with the previous yield. This amount, which has only been exceeded in 1899 and 1897, is over one million dollars above the average of the last ten years, and is subdivided by provinces as follows:

Provinces.	Value of Fish.	Increase.	Decrease.
Nova Scotia .....	\$ 7,809,152	\$ 461,548	
British Columbia.....	4,878,820		\$ 335,254
New Brunswick.....	3,769,742		350,149
Quebec .....	1,989,279	36,144	
Ontario.....	1,333,294		257,153
Prince Edward Island .....	1,059,193	15,548	
Manitoba and North-west Territories.....	718,159	95,248	

As may be noticed, there has been a falling off in three provinces and an increase in the fisheries of the other four provinces. The principal fluctuation is the surplus given by Nova Scotia which may be exclusively attributed to the large catch of mackerel off its shores. The considerable diminution shown in the provinces of New Brunswick and British Columbia is ascribed to the comparative failure of the herring industry in the Bay of Fundy district in the former, and to the shortage in the salmon pack of Fraser river district, B.C., in the latter case.

The features of these various fluctuations and other important matters are fully explained by our different inspectors in their respective reports, forming appendices three to ten of this publication.

The figures given above do not comprise the large quantities of fish consumed by the Indian population of British Columbia, and of the remote parts of the North-west Territories, where fish form their staple food.

The following statement shows the relative values of the principal kinds of commercial fishes (above \$100,000) for the year 1900 as compared with that of the previous year.

Kinds of Fish.	Value.	Increase.	Decrease.
Salmon .....	\$ 3,893,217		\$ 640,803
Cod.....	3,614,775		140,198
Lobsters.....	3,055,350	\$ 183,298	
Herring.....	1,853,237		310,813
Mackerel.....	1,549,448	747,754	
Whitefish.....	705,323	52,161	
Trout.....	657,248		217,282
Haddock.....	608,067		78,544
Hake.....	520,504		75,302
Smelts.....	475,004	33,341	
Halibut.....	405,963	130,753	
Sardines.....	308,021		201,249
Pickarel.....	243,749		30,945
Pollock.....	216,250		26,836
Sturgeon.....	205,662	67,972	
Oysters.....	167,680	5,628	
Alewives.....	162,014	26,706	
Eels.....	125,454	15,874	
Tom cod.....	124,538	1,405	



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The quantity of fish used as bait is valued at \$396,487, that of fish oil at \$208,778, while the fur seal skins of British Columbia have realized \$562,845.

A glance at the above table will show that the increases and decreases are about evenly divided in the different species mentioned. The most accented fluctuations are the increase of nearly 50 per cent in the catch of mackerel, especially felt in the Northumberland Strait, and the falling off in the salmon pack in British Columbia of over half a million dollars. Notwithstanding this decline, salmon still heads the list, with cod as a close second.

The lobster industry not only holds its own but shows an increased value of nearly \$200,000. This improvement cannot be ascribed to the packing industry which remained stationary, but to the steady growth of the live lobster trade with the United States markets, chiefly from the western counties of Nova Scotia. It is an amelioration which should be encouraged as only large lobsters are wanted for this special branch of the industry on foreign markets. With the present mode of rapid transit at our disposal, there seems no good reason why live or fresh lobsters should not be distributed on the markets of all our chief inland cities and towns.

The comparative failure of the Bay of Fundy herring in 1900, explains the deficit of half a million dollars above noticed in the aggregate values of herring and sardines.

The halibut fishery is still progressing, especially in the Pacific water, where their yield is valued \$130,000 more than the previous one.

Of the fresh water species, whitefish and trout are by far the principal kinds. While the former shows an increased value of \$50,000, the latter has fallen off by over \$200,000.

Of the other fluctuations, might be mentioned the large increase in sturgeon and caviare of \$67,000 over the value of the previous season.

From the year 1869 to 1900 inclusive, the five principal commercial fishes have yielded the following enormous values :—

Cod .....	\$121,137,901
Salmon .....	62,996,388
Herring .....	62,518,153
Lobsters...	62,265,477
Mackerel .....	41,232,875

## EXPORT OF FISH.

During the last fiscal the value of the fish including fish oil and marine animals exported from Canada to foreign countries was \$10,720,352.

Details of these fish exports will be found in the annual report of the Department of Customs for 1901.

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## STATEMENT of the production of each Branch of the Fisheries

No.	KINDS OF FISH.	NOVA SCOTIA.		NEW BRUNSWICK.		BRITISH
		Quantity.	Value.	Quantity.	Value.	Quantity.
			\$		\$	
1	Cod, dried..... Cwt.	511,315	2,285,260	85,947	343,788	5,485
	" tongues and sounds..... Brls.	890	8,900	183	1,830	
2	Haddock, dried..... Cwt.	87,964	263,892	7,108	21,324	
	" fresh..... Lbs.	4,650,750	139,523	571,900	17,157	
	" smoked (finnan haddies)..... "	1,437,550	86,253	866,600	52,140	
3	Hake, dried..... Cwt.	161,726	363,883	29,350	66,038	
	" sounds..... Lbs.	51,549	25,774	26,612	13,306	
4	Pollock..... Cwt.	88,581	177,162	19,544	39,088	
5	Tom cod or frost fish..... Lbs.	236,420	11,821	1,877,500	93,875	
6	Halibut..... "	1,639,501	163,950	91,100	9,110	4,261,000
7	Flounders..... "	1,020,685	51,034	125,900	6,295	
	Salmon, preserved in cans..... "	6,160	924	10,600	1,590	29,113,440
	" fresh..... "	511,604	102,321	1,223,650	244,730	1,728,000
8	" smoked..... "	9,038	1,807	1,100	220	301,000
	" pickled..... Brls.	155	2,325			4,950
	" dry salted..... Lbs.					5,700,000
9	Trout..... "	109,200	10,920	232,600	23,260	339,750
10	Ouananiche..... "					
11	Whitefish..... "					
12	Smelts..... "	385,830	19,291	7,863,050	393,152	86,500
13	Oulachons (in B.C.)..... "					1,399,100
	Herring, salted..... Brls.	82,732	330,928	181,696	726,784	
14	" fresh..... Lbs.	3,055,240	30,552	3,723,500	37,235	1,145,000
	" smoked..... "	749,800	14,996	6,639,000	132,780	
	" kippered..... Cans.			228,200	22,820	
15	Sardines, preserved..... "			1,870,000	93,500	
	"..... Brls.			101,116	200,445	
16	Shad..... "	1,750	17,500	6,383	63,830	25
17	Alewives..... "	11,923	47,692	26,500	106,002	
18	Pike..... Lbs.					
19	Maskinongé..... "					
20	Bels, salted..... Brls.	2,364	23,640	2,245	22,450	
	" fresh..... Lbs.					
21	Perch..... "			30,000	1,500	
22	Pickereel..... "			146,000	7,300	
23	Bass (sea)..... "	10,100	1,005	327,600	32,760	
24	" (achigan)..... "					
25	Mackerel, salted..... Brls.	57,442	861,630	1,430	21,450	
	" fresh..... Lbs.	3,224,972	386,996	786,000	94,320	
26	Sturgeon..... "			10,000	700	105,000
	" caviare..... "			350	175	1,500
27	Lobsters, canned..... "	5,263,780	1,052,754	2,638,692	407,738	
	" fresh or alive..... Cwt.	169,195	845,975	19,729	98,645	
28	Oysters..... Brls.	1,855	7,420	19,240	76,960	3,000
29	Clams..... "	1,827	8,322		67,486	
30	Squid..... "	5,351	21,404	1,104	4,416	
31	Coarse and mixed fish..... "	58,432	116,864	6,195	12,390	
	"..... Lbs.	378,500	7,185	+99,500	5,970	504,000
32	Home consumption (not included above).....					
33	Fur seal skins (in B.C.) *..... No.					35,523
34	Hair..... "	24	29	77	110	7,825
35	Belugas (white whales)..... "					
36	Fish oil..... Galls.	360,431	108,128	53,680	16,089	123,100
37	Fish used as bait..... Brls.	103,858	155,787	88,823	138,334	
38	Fish used as manure and guano..... "	110,610	55,305	101,300	50,650	2,000
Totals.....			7,809,152		3,769,742	

\* Add 20 sea-otter skins, \$8,000.

† Dulse.

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in the different Provinces of Canada for the Year 1900.

COLUMBIA.	QUEBEC.		ONTARIO.		P. E. ISLAND.		MANITOBA AND N. W. TERRITORIES.		No.
Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
\$		\$		\$		\$		\$	
27,425	196,666	789,634			38,352	153,408			1
	290	2,900			163	1,630			2
	2,286	6,858			6,635	19,905			3
	29,200	876			4,625	139			4
	738	1,661			15,263	34,342			5
					31,000	15,500			6
	780,000	18,340			10,050	502			7
213,050	190,028	19,003			8,500	850			8
2,911,344									
172,800	693,707	138,741			500	100			9
30,100									10
49,500	581	8,715							11
228,000									12
33,975	446,687	44,669	5,477,093	531,854	40,700	4,070	170,000	8,500	13
	75,000	7,500							14
	50,600	4,048	2,711,258	216,055			9,704,400	485,220	15
4,325	460,400	23,020			704,325	35,216			16
71,360									17
	43,744	174,976	1,031,138	4,126	35,664	142,656			18
48,350	2,064,960	20,650	7,971,738	159,435	469,110	4,691			19
	112,900	2,258							20
									21
	4,692	14,076							22
250	192	2,273			3	30			23
					2,080	8,320			24
	330,550	13,222	1,285,838	51,433			1,562,300	31,246	25
	47,650	2,859	405,826	24,350					26
	206	2,060			551	5,510			27
	1,153,091	69,185	43,490	2,609					28
	427,700	12,831	1,110,117	33,303			48,000	960	29
	352,111	17,605	2,605,618	130,281			2,952,100	88,563	30
									31
	114,895	9,192	374,712	29,977					32
	7,951	119,265			3,613	54,195			33
					96,600	11,592			34
5,250	504,899	30,294	876,212	52,573			1,039,500	61,790	35
750			90,761	45,380			17,500	8,750	36
	1,022,106	204,421			2,223,712	444,742			37
	80	400			135	675			38
12,000					17,825	71,300			39
22,500					1,420	4,120			40
	5,044	20,176			622	2,488			41
38,700	665	1,330			203	406			42
26,200	2,676,200	30,652	2,556,837	51,918			2,159,200	28,842	43
365,000							428,800	4,288	44
562,845									45
5,869	25,762	32,203			85	170			46
	168	672							47
35,227	146,317	43,895			18,131	5,439			48
	44,903	67,354			23,341	35,012			49
6,000	62,930	31,465			2,185	2,185			50
4,878,820		1,989,279		1,333,294		1,059,193		718,159	

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## RECAPITULATION

Of the Yield and Value of the Fisheries in the Dominion of Canada for the Year 1900.

No.	Kinds of Fish.	Quantity.	Value.	Total Value.
1	Cod, dried..... Cwt.	897,765	\$ 3,599,515	\$
	" tongues and sounds..... Brls.	1,526	15,260	
				3,614,775
2	Haddock, dried..... Cwt.	103,993	311,979	608,067
	" fresh..... Lbs.	5,256,475	157,695	
	" smoked—(finnan haddies)..... "	2,304,150	138,393	
3	Hake, dried..... Cwt.	207,077	465,924	520,504
	" sounds..... Lbs.	109,161	54,580	
4	Pollock..... Cwt.	108,125		216,250
5	Tom cod or frost-fish..... Lbs.	2,903,970		124,538
6	Halibut..... "	6,190,129		405,963
7	Flounders..... "	1,146,585		57,329
	Salmon, preserved in cans..... "	29,130,200	2,913,858	3,893,217
	" fresh..... "	4,156,961	658,592	
8	" smoked..... "	311,638	32,227	
	" pickled..... Brls.	5,686	60,540	
	" dry, salted..... Lbs.	5,700,000	228,000	
9	Trout..... "	6,816,030		657,248
10	Ouananiche..... "	75,000		7,500
11	Whitefish..... "	12,466,258		705,323
12	Smelts..... "	9,500,105		475,004
13	Oulachons (in B.C.)..... "	1,399,100		71,360
	Herring, salted..... Brls.	344,867	1,379,470	1,853,237
14	" fresh..... Lbs.	18,429,548	300,913	
	" smoked..... "	7,501,700	150,034	
	" kippered..... Cans.	228,200	22,820	
15	Sardines, preserved..... "	1,870,000	93,500	308,021
	"..... Brls.	105,808	214,521	
16	Shad..... "	8,353		83,883
17	Alewives..... "	40,503		162,014
18	Pike..... Lbs.	3,178,688		95,901
19	Maskinonge..... "	453,476		27,209
20	Eels, salted..... Brls.	5,366	53,660	125,454
	" fresh..... Lbs.	1,196,581	71,794	
21	Perch..... "	1,615,817		48,594
22	Pickarel..... "	6,055,829		243,749
23	Bass (Sea)..... "	337,600		33,765
24	" (Achigan)..... "	489,607		39,169
25	Mackerel..... Brls.	70,436	1,056,540	1,549,448
	" fresh..... Lbs.	4,107,572	492,908	
26	Sturgeon..... "	2,535,611	150,607	205,662
	" caviare..... "	110,111	55,055	
27	Lobsters, preserved in cans..... "	10,548,290	2,109,655	3,055,350
	" fresh or alive..... Cwt.	189,139	945,695	
28	Oysters..... Brls.	41,920		167,680
29	Clams..... "			102,428
30	Squid..... Brls.	12,121		48,484
31	Coarse and mixed fish..... "	84,845	169,690	320,457
	"..... Lbs.	8,374,237	150,767	
32	Home consumption, not included above.....			369,288
33	Fur seal skins in B.C..... No.	35,523		562,845
34	Hair..... "	33,773		38,381
35	Beluga skins (white whales)..... "	168		672
36	Sea-otter skins..... No.	20		8,000
37	Fish oil..... Galls.	706,609		208,778
38	Fish used as bait..... Brls.	260,925		396,487
39	" " manure and guano..... "	279,025		145,605
	Total for 1900.....			21,557,639
	" 1899.....			21,891,706
	Decrease.....			334,067



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## RECAPITULATION

SHOWING the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1900, inclusive, as compiled from the Annual Reports of the Department of Fisheries.

Year.	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba and North-west Territories.	Total for Canada.
	\$	\$	\$	\$	\$	\$	\$	\$
1870.....	4,019,425	1,131,433	No data.	1,161,551	264,982	No data.	No data.	6,577,391
1871.....	5,101,030	1,185,033	"	1,093,612	193,524	"	"	7,573,199
1872.....	6,016,835	1,965,459	"	1,320,189	267,633	"	"	9,570,116
1873.....	6,577,085	2,285,662	207,595	1,391,564	293,091	"	"	10,754,397
1874.....	6,652,802	2,685,794	288,863	1,608,660	446,267	"	"	11,681,886
1875.....	5,573,851	2,427,654	298,927	1,596,759	453,194	"	"	10,350,385
1876.....	6,029,050	1,953,389	494,967	2,097,668	437,229	"	"	11,117,000
1877.....	5,527,858	2,133,237	763,036	2,560,147	438,223	"	"	12,005,934
1878.....	6,131,600	2,305,790	840,344	2,664,055	348,122	"	"	13,263,678
1879.....	5,752,937	2,554,722	1,402,301	2,820,395	367,133	"	"	13,525,254
1880.....	6,201,061	2,744,477	1,675,089	2,631,556	444,491	"	"	14,499,979
1881.....	6,214,782	2,930,904	1,955,290	2,571,962	509,903	"	"	15,871,162
1882.....	7,131,418	3,192,339	1,855,687	1,976,516	825,457	"	"	16,824,092
1883.....	7,689,374	3,185,674	1,272,468	2,138,997	1,027,033	"	"	16,958,192
1884.....	8,763,779	3,730,454	1,085,619	1,694,561	1,133,724	"	"	17,766,404
1885.....	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	"	"	17,722,973
1886.....	8,415,362	4,180,227	1,141,991	1,741,382	1,435,998	"	"	18,679,288
1887.....	8,379,782	3,559,507	1,037,426	1,773,567	1,531,850	"	"	18,386,103
1888.....	7,817,030	2,941,863	876,862	1,860,012	1,839,869	"	"	17,418,510
1889.....	6,346,722	3,067,039	886,430	1,876,194	1,963,123	"	"	17,653,256
1890.....	6,636,444	2,639,055	1,041,109	1,615,119	2,009,637	"	"	17,714,902
1891.....	7,011,300	3,571,050	1,238,733	2,008,678	1,806,389	"	"	18,977,878
1892.....	6,340,724	3,203,922	1,179,856	2,236,732	2,042,198	"	"	18,941,171
1893.....	6,407,279	3,746,121	1,133,368	2,218,905	1,694,430	"	"	20,686,661
1894.....	6,547,387	4,351,526	1,113,738	2,303,386	1,659,968	"	"	20,719,573
1895.....	6,213,131	4,403,158	976,886	1,867,920	1,584,473	"	"	20,190,338
1896.....	6,070,895	4,799,423	976,126	2,025,754	1,605,674	"	"	20,407,425
1897.....	8,090,346	3,934,135	954,949	1,737,011	1,289,922	"	"	22,783,546
1898.....	7,226,034	3,849,357	1,070,202	1,761,440	1,433,632	"	"	19,667,121
1899.....	7,347,604	4,119,891	1,043,645	1,933,134	1,590,447	"	"	21,891,706
1900.....	7,809,152	3,769,742	1,059,193	1,989,279	1,333,294	"	"	21,557,639
Totals .....	208,415,503	96,613,448	29,170,080	60,296,165	33,614,092	65,403,706	8,237,687	501,646,667

## BAIT COLD STORAGE.

Reference was made in previous reports to the inauguration of a system of bait cold storage, and the leading features of this system were thus summarized :

1. Formation of Fishermen's Bait Associations at the various fishing centres.
2. Incorporation of the associations formed under special Acts passed by the local legislatures of the Maritime provinces.
3. Erection of bait freezers under the superintendence of skilled foremen provided by the department.
4. Audit of the accounts by one of the officials and the payment of 50 per cent of the cost by the department.
5. Practical explanation of the method of freezing and storing fish frozen for bait.
6. Provision of suitable forms for returns to be made to the department showing daily the amount of fish received and issued and the temperatures maintained.
7. Payment of a bonus of \$5 per ton for bait frozen up to 20 tons, on the certificate of an inspector.

The coöperative cold storage work, undertaken by the department and the fishermen of the Maritime provinces, for the purpose of providing a supply of bait during periods of scarcity has been continued during the past year with success.

The operations have been confined to the provinces of Nova Scotia and Prince Edward Island, under special Acts passed by the legislatures of these provinces. An Act has also been passed by the legislature of New Brunswick, permitting the free incorporation of Fishermen's Bait Associations. Arrangements were made to erect freezers at several points in this province, notably at Caraquet, but they were not carried out. The legislature of the province of Quebec did not deem it advisable to pass a special act for the free incorporation of Bait Associations, and in consequence, it was impossible to organize associations to build bait freezers in this province. It is to be hoped during the coming session of this local legislature, that the benefits of this system will be recognized and provision made for its extension into Quebec.

The plan adopted for the aid of the fishermen in this important matter of providing a constant bait supply, has been devised on the principle of bearing equally with them the necessary expenditure for construction and equipment, overseeing as far as possible, that no mistakes are made in operating, but leaving the internal affairs and management solely under the control of a local board of directors.

Nineteen freezers have been erected, thirteen of which operated during the past fishing season. The bait freezers constructed have a combined storage capacity of 470 tons of bait. Those operated this season had storage capacity of 330 tons and in all 156 tons of bait were frozen, or, on an average, 47 per cent of their total capacity was utilized. Inverness County, C.B., and Prince County, P.E.I., contain the largest number of freezers, viz, three each. Antigonish, Guysborough and Shelburne Counties in Nova Scotia, contain two each, while one freezer has been erected in each of the counties of Kings, P.E.I., Victoria, Cape Breton, Richmond, C.B., Halifax, Yarmouth and Digby in Nova Scotia.

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The method of carrying on the work has been outlined under the heads of forming Fishermen's Associations ; incorporating the same ; erection of bait freezers ; explanation of methods of freezing ; provision for returns of bait frozen and payment of bonus of \$5 per ton.

The work during the past season has been carried out under the above arrangement, special emphasis being laid on the ' Explanation of methods of freezing.' Trained men who have been employed in the commercial freezers at Canso were secured and sent to the various freezers for a period of a week or ten days, when they were receiving bait, and this arrangement has proved very satisfactory.

Of the thirteen freezers operated during the past season, six were entirely successful in fulfilling their object, viz., those at Frog Pond, Alberton, Ballentyne's Cove, Bayfield, Sambro and Lower East Pubnico. Five were less successful, viz., Port Hood Island, Whitehead, Port Beckerton, Gabarus and Clarke's Harbour, while two must be counted as failures, Souris, P.E.I., and Port La Tour, N.S. There is no reason, however, why the seven latter named freezers should not be equally as successful in the future as the first named ones have been in the past.

In every case, the freezers have performed their work with satisfaction, the bait fish being well frozen and, when the storage rooms have been attended properly, have kept in good condition.

The work undertaken by the department has attracted the attention of the Governments of Newfoundland and France. At the request of the Honourable the Minister of Marine and Fisheries of Newfoundland, full information and plans were forwarded to that colony. The French ship *Islay* called at several points on Prince Edward Island during the past summer for the purpose of investigating the operation of the bait stations in that province.

From its inception, the bait cold storage work has been favourably commented on in the Maritime provinces and during the past season the interest taken in it has not decreased.

Further information as to the operations at each bait station will be found in Appendix No 11 of this report.

## FISH CULTURE.

The Fish-culture report for the year 1901 by Professor Edward E. Prince, Commissioner of Fisheries forms Appendix 12 of this publication. It embraces a general review of the operations carried on during the year including not only the capture of parent fish, collection of ova, the incubation and planting of the fry of various fishes of economic importance, but also the experimental scheme for introducing the black bass of Ontario into the waters of British Columbia and the North-west Territories.

During the year, no less than 203,540,000 fry were hatched in Government hatcheries and distributed in Canadian waters. About half of these fry were lobsters, the balance consisting of salmon, great lake trout and whitefish.

Professor Prince calls attention to the fact that owing to special circumstances three of the hatcheries could not be operated, but the work in the remaining twelve



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hatcheries was so successful that the total output of fry was far in excess of the average and has only been exceeded in five previous years.

The building of three new hatcheries, one in the province of Quebec (at Gaspé), one in the province of Nova Scotia (at N. E. Margaree), and one in British Columbia, on the Skeena River, are referred to and the completion of the Granite Creek Salmon Hatchery, on Shushwap Lake, near Sicamous, B.C., is mentioned as a notable feature in the year's fish culture work. During the present fall (1901) the tanks of the new hatchery have been filled with an enormous supply of sockeye eggs in splendid condition. Thus the operations in the various hatcheries have been sustained with characteristic success and activity, and public interest in the work was never more general or more intense.

#### OYSTER CULTURE.

As an annex to the Fish culture appendix will be formed a full report of last season's work on the cultivation of oysters by Mr. E. Kemp, the department's expert.

Mr. Kemp devoted most of the summer in examining the condition of oyster areas in Nova Scotia and Prince Edward Island, with a view to preparing favourable grounds for the planting of oysters.

At page 266 of this report will be found a recapitulation table showing the oyster production of the Dominion for the last twenty-five years, representing an aggregate value of nearly four million dollars.

#### FISHERIES PROTECTION SERVICE.

The report of the operations of the Fisheries Protection Service during the season of 1901 by Commander O. G. V. Spain forms Appendix 13 of this volume. It is pleasing to note that this service has again been carried on without accidents and in a very satisfactory manner.

The fleet of cruisers consisted of the same ships as last year, viz. : the *Acadia*, *La Canadienne*, *Curlew*, *Osprey*, *Kingfisher*, *Constance*, *Stanley* and *Petrel*. The latter cruising in the Ontario great lakes and the others in the Gulf of St. Lawrence and off the Atlantic coast. The steamer *Quaara* was also partly employed for the protection of our fisheries off the British Columbia coast.

The number of United States fishing vessels taking advantage of the *modus vivendi* licenses was 82 and the amount received therefrom was \$9,445.

A glance at the long list of foreign fishing schooners calling at our ports, shows of what importance these harbours are to them.

At the end of the season, Commander Spain and his officers devoted much time to the protection of the lobster industry, and any traps found in use during the close season were seized and destroyed.

#### FISHERIES INTELLIGENCE BUREAU.

A full report of the Intelligence Bureau service, which also comes under the control of Commander Spain, by the officer in charge at Halifax, forms an annex to Appendix 13.



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Compilations of the various reports of 53 stations now dispersed on our Atlantic coast are daily sent to Halifax and then wired to the principal fishing localities of the provinces.

## THE FISHERIES STAFF.

The outside staff of fishery officers connected with this department during the last calendar year aggregates 848 men, including the crews of the fisheries protection fleet.

These officers were dispersed as follows :—

Ontario.....	3
Quebec.....	12
Nova Scotia.....	61
New Brunswick.....	30
Prince Edward Island .....	5
Manitoba.....	5
North-west Territories... ..	7
British Columbia.....	10
Fishery guardians employed in 1901.....	295
Officers and crews of the fisheries protection fleet .....	420
Total .....	848

The following are inspectors of fisheries in the different provinces of the Dominion :

Name.	P. O. Address.	Extent of Jurisdiction.
Bertram, A. C. . . . .	North Sydney, N.S.	District No. 1.—Cape Breton Island.
Hockin, Robt. . . . .	Pictou, N.S.	District No. 2.—Cumberland, Colchester, Pictou, Antigonish, Guysboro Halifax, and Hants counties.
Ford, L. S. . . . .	Milton, N.S.	District No. 3.—Lunenburg, Queen's, Shelburne, Yarmouth, Digby, Annapolis and King's counties.
Pratt, J. H., capt. . . . .	St. Andrews, N.B.	District No. 1.—The counties of Charlotte and St. John.
Chapman, Robt. A. . . . .	Moncton, N.B.	District No. 2.—Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert counties.
Miles, H. S. . . . .	Oromocto, N.B.	District No. 3.—King's, Queen's, Sunbury, York, Carleton and Victoria counties.
Matheson, J. A. . . . .	Charlottetown . . . .	Prince Edward Island.
Wakeman, Wm., M.D. . . . .	Gaspé Basin, Que.	Lower St. Lawrence River and Gulf.
Lavoie, N., M.D. . . . .	L'Islet, Que . . . . .	That portion of Quebec, south of River St. Lawrence and north and east of and including county of Bellechasse.
Belliveau, A. H. . . . .	Ottawa . . . . .	Province of Quebec, north of River St. Lawrence and west from and including River Saguenay, and the portion south of River St. Lawrence which lies west and south of the county of Bellechasse.
Hurley, J. M. . . . .	Belleville . . . . .	That portion of Ontario east of the western boundary line of the counties of Durham, Victoria and Haliburton, including Lake Seugog and the eastern boundary of Muskoka and Parry Sound districts.
Sheppard, O. B. . . . .	Toronto, Ont. . . . .	That part of the province of Ontario west of the eastern boundaries of the county of Ontario, and the districts of Muskoka and Parry Sound along the Mattawa and Ottawa Rivers, and northward along the north-eastern boundary line of said province to James Bay.
Duncan, A. G. . . . .	Marksville, Ont . . . .	That portion of Ontario lying west and north of Lake Nipissing, the Rivers Mattawa and Ottawa and the north-east boundary line of the province to James Bay, embracing Nipissing, Algoma, Thunder Bay and Rainy River districts, Lake Superior and such portions of Lake Huron and Georgian Bay as lie adjacent or opposite to the part of Ontario above described.
Young, W. S. . . . .	Selkirk, Man. . . . .	Province of Manitoba.
Miller, E. W. . . . .	Qu'Appelle, N.W.T.	All the North-west Territories.
Stewart, Theophilus . . . .	Dawson City. . . . .	Yukon district, N. W. Territories.
Sword, C. B. . . . .	N. Westminster, B.C.	Province of British Columbia.

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The following are the officers in charge of the Government Fish Hatcheries :

Name.	Rank.	P. O. Address.
Armstrong, Wm.....	Officer in charge of Government Fish Hatchery.....	Newcastle, Ont.
Parker, Wm.....	"	Sandwich, Ont.
Walker, John.....	"	Ottawa, Ont.
Finlayson, Alex.....	"	Magog, Que.
Catellier, L. N.....	"	Tadoussac, Que.
Lindsay, Robt.....	"	Gaspé Basin.
Mowat, Alex.....	"	Campbellton, N.B.
McCluskey, Chas.....	"	Grand Falls, N.B.
Sheasgreen, Isaac.....	"	South Esk, Miramichi, N.B.
Ogden, A.....	"	Bedford Basin, N.S.
"	Government Lobster Hatchery.....	Pictou, N.S.
Sword, C. B.....	Government Fish Hatchery.....	New Westminster, B.C.
Young, W. S.....	"	Selkirk, Man.
Kemp, Ernest.....	Oyster Culture.....	Ottawa, Ont.

### PRELIMINARY REPORTS ON THE FISHING SEASON OF 1901.

Herewith appended are the preliminary reports on the fishing operations of the season just closed, received from our different inspectors in their respective districts.

#### NOVA SCOTIA.

*Inspector A. C. Bertram, of Sydney, C.B.*, reports as follows on the fisheries of the Cape Breton district for 1901 :—

The statistics for the fishing season just closed will give a decreased catch in nearly all important branches of the fishing industry. In some remote districts, however, there is an average catch in commercial fish, but those districts are in the coastal waters, far from the busy mining operations, railway construction, &c. There is no indication in any sections of the coastal waters surrounding this island that fish are scarcer than in previous years, on the contrary, cod, salmon and mackerel have been more plentiful, but owing to the development now going on in coal mines, iron and steel plant construction and operation, the quarrying of limestone and the building of new railway lines, as well as the increased number of men employed on the Intercolonial railway road-bed during this season, the falling off in the catch of fish for 1901 can alone be attributed to fishermen abandoning the prosecution of the fishery for other less uncertain employment.

There is every probability of the live lobster industry being more vigorously prosecuted next season than in the past, as the price for the canned article rules low and many canners lost money last year. The cause of the fall in the price of preserved lobsters is owing to over production, the markets abroad being overstocked.

A drouth extending over fourteen weeks prevailed during mid-summer, which caused salmon and trout to remain in the tidal waters, but when heavy rains occurred during the latter part of September and October salmon ascended to the upper waters of the rivers in large numbers. The close seasons were well observed during the year.

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*Inspector Robt. Hockin, of Pictou*, reports a shortage in all the important branches compared with last year, and the yield of all the fisheries will probably be under the average of that of the past twelve years. The *lobster* fishery shows a falling off of about 10 per cent. The *cod* fishery in the eastern part of the district was better than last year, but in the western or Margaret's Bay portion, there was so great a decrease that the yield will be 15 per cent less than last year. While the catch of *mackerel* in the season 1900 was the largest during the past twelve years, this season's will only be about one-half of last season's, but it will be about an average of that of the past twenty years. The *hake* and *haddock* fisheries show a slight decrease, but there was an unusually large catch of *pollock*, an increase of 75 per cent. The *herring* fishery shows a decrease of about 40 per cent. The returns of *halibut* are only 50 per cent of that of last year. The *shad* fishery was a failure and the catch not more than 10 per cent of 1900. The *smelt* fishery is not a very important one and the shortage will not be great. The *salmon* fishery alone shows an increase over the catch of last year of say 10 per cent. The other fisheries show about an average yield.

## NEW BRUNSWICK.

*Inspector J. H. Pratt, of St. Andrews*, reports that the past season has been quite a successful one for the fishermen of his district. The total value of catch will show quite an increase over that of 1900. This is attributed in a large measure to the immense school of sardine herring that entered St. Andrews Bay during the latter part of the summer, and remained there till November. The other parts of the district will also show a marked improvement. Quite an increase will also be noticed in the catch of cod and haddock. A surprisingly large catch of *pollock* is reported by the fishery officers at Grand Manan and Campobello, which was due not only to the fact that pollock were more plentiful than they have been for many years, but that more men were engaged in this fishery. The slaughter of pollock by the use of dynamite at Grand Manan, by an increased number of vessels this season, was an unfortunate but important factor in the unusually large catch.

The *lobster* fishery will yield about the same as in 1900, and it is beyond a doubt that in Charlotte County the lobsters are becoming less each year, although the amount of lobster fishing gear is annually increasing. The adoption of the 10½ inch law, as in St. John County, is advocated by the large majority of the fishermen, and there is no doubt that this change is now an absolute necessity. The catch of lobsters in the latter county will show about the same as last season.

*Salmon* will show an average catch not only in the St. Croix River but among the net fishermen of the Bay of Fundy.

The canning of the several kinds of fish is becoming quite an industry among the fishermen of the Bay of Fundy, and the number of cases of canned sardine herring put up will show a large increase.

Many hundreds of barrels of clams were exported from our numerous beds, and it seems that in the near future some measures will have to be adopted in order to save this valuable fishery from entire ruin.

*Inspector R. A. Chapman, of Moncton, N.B.*, says that the aggregate catch will be again larger than that of the previous year. More salmon have been taken at all the



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principal fishing districts than in 1900, these fish had much difficulty in reaching the spawning grounds last fall owing to very low water. Spring herring for food, bait, &c., were caught in the usual large quantities, many of which were smoked in large smoke houses recently erected at Point au Chêne, Bay Verte, &c. Fall herring on the Caraquet Miscou banks were also very plentiful, and a large catch secured which sold readily at paying prices. The catch of codfish is somewhat in advance of that of last year, and, prices being good, it was an exceedingly profitable season for those interested in this fishery either as fishermen or dealers. The take of oysters outside of those fished on the reserve in Shediac last year will exceed that of 1900; of hard shell clams (qualogs) large quantities were raked in Buctouche and Cocagne, even exceeding somewhat the take of the previous year, and now with the Order in Council giving the local officers power to prevent any encroachment upon the oyster beds, this fishing can be safely prosecuted. The clam canning establishment at Inkerman, Gloucester County, has considerably increased its output. More smelts were taken than ever before. I believe the aggregate will reach fully 8,000,000 lbs. (4,000 tons), the benefits of this fishery to the people can hardly be overestimated. Mackerel were abundant early in the season but were of an inferior quality; later when fat and good they were scarce. The catch of lobsters has again fallen off except in parts of the Straits of Northumberland, where it is believed they are getting some help from the Pictou hatchery and one or two other places. I believe the only way to remedy this would be to establish hatcheries, say at Shemogue, Westmorland County, and on the north side of Shippegan Island, Gloucester County, where large fishing is done in each case in the immediate vicinity, and where I have no doubt 400,000,000 fry from both establishments could be turned out yearly, and if even 5 per cent of these matured it would give more than double the quantity now caught on our coasts from Quebec to Nova Scotia.

The catch of other kinds of fish was about an average one, except of bass, which is again smaller. Prices of all kinds of fish have been good, making it a profitable year for all concerned.

*Inspector H. S. Miles, of the St. John River district*, states that the fishing industry in his district during the season just closed has been most satisfactory to all parties concerned. Although there was a slight falling off in the catch of shad and alewives on account of continued high gales prevailing at the time, they are said to be the most numerous in the St. John river and its tributaries, however the decrease was so slight that very few complaints were heard. The salmon fishermen on the St. John river in King's, Queen's and Sunbury counties were all satisfied with their catch. In York county complaints were heard that few salmon were taken in comparison to other years, however they were as cheap in Fredericton last summer as on former occasions and the supply always was in excess of the demand. Salmon in the upper St. John, in Carleton and Victoria counties, were numerous in the past year and reports say that they went up the different tributaries in large numbers this fall, especially the Tobique river.

#### PRINCE EDWARD ISLAND.

*Inspector J. A. Matheson, of Charlottetown, P.E.I.*, says the fisheries for the season have been fairly sustained in some sections, in others a shortage is noticed. In Prince and Queen's counties the oyster catch has been about up to former years. A ready market and good prices were obtained throughout the season, which was satisfactory to shippers and fishermen.



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The *mackerel* catch shows an increase, and fishermen look forward to an improvement in this branch.

*Lobsters* have fallen a little short, but not sufficient to cause alarm.

*Herring* were not as plentiful as in former years. All other kinds of fish were in fair supply.

In King's county lobsters were in excess of last season. Mackerel not so plentiful; quite a falling off in codfish and hake, especially in Murray harbour district, principally caused by not having been prosecuted to the same extent as in former years through the demand for labour in building a branch railway in that locality, and also at the iron and steel works at Sydney. But, on the whole, the season was well up to the expectations of the employer and employed.

## QUEBEC.

*Commander Wakeham, officer in charge of the Gulf of St. Lawrence Division*, reports that the returns for 1901 will show a considerable increase in the total value over that for 1900. This will be due entirely to the greatly increased yield of the salmon and cod fisheries. The lobster and fat herring returns show a considerable decrease.

On that part of the north shore of the Gulf west of Natashquan, the yield from the *salmon* net fishery on the sea coast and in the estuaries, was phenomenally great. Over most of the coast of Gaspé and Bonaventure the fishing was fair, slightly below an average, while on the lower north coast, from Blancs Sablons west to Natashquan, the catch was poor.

The summer *cod* fishing all over the Gulf was one of the best we have ever had. Fish were well inshore and unusually abundant, while the weather was fine. On the Labrador, in June and July, for the third season in succession, heavy field ice drove in through the Strait of Belle Isle, and hung about the shore as far west as Harrington, greatly interfering with the fishing, but whenever they could be got at through the ice, fish were taken in the trap nets. The fall cod fishing was a complete failure owing to heavy weather and a scarcity of herring, the usual fall bait; but so abundant was the summer cod fishing, which begins with June and ends with August, that the returns will show one of the best fisheries we have ever had in spite of the fact that dogfish did a great deal of damage during the summer and that practically nothing was done in the fall. Prices paid were above the average and fishermen have made a good season.

*Herring* were as abundant as ever during the spring spawning season, but afterwards seemed to have backed off shore, and very few fat summer or fall herring were taken anywhere along the coast. This failure has been quite seriously felt by our fishermen, as salted fat herring forms the staple food of the people during the winter. The *lobster* fishing continues to fall off, and in spite of the lengthened season and a reduction in the legal size, a very serious decrease will be shown by the returns. *Mackerel* were abundant at the Magdalen Islands all through the season, but the price was low and the fishing was not prosecuted with any very great energy. The fall *smelt* fishing in Gaspé Bay was about an average. Owing to the mildness of the season the first catch of smelt did not reach New York in very good order. When the weather got cooler and fish were coming into the bay more abundantly, the steamer *Admiral* stopped running and the fishing came to an abrupt conclusion.

*Inspector N. Lavoie, M.D., of L'Islet*, reports as follows:—The principal kinds of fish frequenting the waters of this district are cod, herring, salmon, eels, sardines, shad, sturgeon, pickerel, whitefish, &c. The yield of the fisheries for the year 1901 has been satisfactory. Cod, which, for many years past, had completely deserted the upper shores of the county of Gaspé, has again made its reappearance in sufficient numbers to warrant a hope that former abundance will again revive. This happy result is, undoubtedly, due to the disappearance of white whales from these waters. *Herring* was abundant everywhere, and large quantities were pickled or used fresh, as bait or manure. Owing to improved modes of fishing and the more general use of gill nets, fishermen are enabled to secure better catches than in former years. *Salmon* fishing, which is reported as so productive around Gaspé and along the coast of Bay des Chaleurs, gave only middling results. Some stations did well; others poorly. It is stated that 208 salmon were killed with the fly in Ste. Anne des Monts River, and 80 in Matane River. Metis River is reported as being well stocked with fish. Cape Chatte River was not leased, and as a consequence, I apprehend, much poaching was carried on there. No reliable information could be had of the quantity of trout caught in the inland lakes, but it must have been large. *Sardine* fishing was a comparative failure; the statistics showing only 244,000 lbs. against 360,000 in 1900. Bar fishing was more remunerative than last year; the statistics showing an increase of about 6,000 lbs. Shad fishing was a failure. About twenty-two white whales were killed at River Ouelle; ten more than last year. The skins sold for three dollars; and the oil fetched twenty-two cents a gallon. It is reported that eighteen seals were killed at River du Loup; seven at Bic; and twenty at Cr ne Island. Eel fishing shows a decline of nearly 50 per cent.

During two months of the year, May and June, I am engaged in supervising the lobster canneries; that portion of the coast extending from Maguasha to Gaspé Basin, issuing canning licenses, distributing labels and seeing generally that the law is strictly complied with. I have never met with better disposed people; always pleased and even anxious to help the department and its officer in every way. Not a single complaint reached me during the whole season; not a violation of the law came under my notice. These facts speak volumes for the mens' honesty. Although the number of traps and canneries has more than doubled within the last twenty years, the production failed to keep pace with this increase, so much so, that the profits have fallen off in such a manner as to render the business unprofitable. There were, this year, 29 canneries in operation; the pack amounted to 3,778 cases, against 3,862 in 1900, and 4,164 in 1899. Again, in 1880, with about half the number of traps and canneries, the yield amounted to 9,345 cases. During that year, some fishermen caught as much as 50,000 lbs. of lobsters with only 45 to 50 traps. Owing to the above facts, which cannot be gainsaid, it is evident that measures of some kind are necessary, if this valuable industry is to be saved from total extinction. What these measures should be, I am unable, at present, to determine. Some parties suggest a total cessation of canning for five years; others favour a further shortening of the fishing season, or curtailment of the number of traps, &c. It will be for the department to consider these alternatives, so as to determine what had better be done for the preservation of this fishery.

*Inspector A. H. Belliveau* who has charge of the inland division of Quebec states that as far as he can judge from his few visits to the principal fishing centres of his district the yield of fish during the season of 1901 will be much inferior to the previous

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one. The better grades of fish are steadily falling off and the catch now chiefly consists of coarse fish. This depletion can be safely ascribed not only to overfishing in the past, but to the indiscriminate use of small meshed gear capturing young immature fish, unfit for food.

Lakes St. Francis and St. Louis will henceforth receive better protection, as netting of all kinds has been prohibited therein for a period of two years. The same restriction is also applied to all the beautiful lakes of the eastern townships, thus facilitating the duties of the local officers in enforcing these fishery regulations in that neighbourhood. Unfortunately a few netting permits were granted last summer in some of the best fishing lakes in the vicinity of Sherbrooke. This retrograde step will have a bad effect on the residents around these and other lakes, as it will further induce them to poach, justifying their action by the thought that they might as well fish as others.

To make this prohibition of all nets thoroughly efficient, they should be liable to confiscation on sight whether wet or dry, wherever found by an officer, but I fear such a step would be beyond our Act.

Mr. Belliveau says that most of the remarks in his report (p. 191) apply to this season as well as to the former.

## ONTARIO.

*Inspector J. M. Hurley, of Belleville*, reports as follows on the fisheries of Eastern Ontario district :—

The forty-three local overseers in my division are all deeply interested in carrying out the regulations, and studying the habits of fish in their respective localities, at the same time advising the fishermen to adhere closely to the fishery regulations.

In the Bay of Quinté district no nets of any kind were allowed in the waters during the months of July, August, and the first two weeks of September of this year. Several fishermen who disregarded the instructions of the local overseer had their seines and nets confiscated. All admit now that it is the right thing to do and consequently fish were more plentiful this fall than in several years past, as no nets were allowed in the Bay of Quinté during the sporting season while visitors were camping and angling. Bass and maskinonge were plentiful in Bay of Quinte and Trent River districts. In Crow Lake near Marmora several parties landed maskinonge weighing from 30 to 35 lbs. I saw one that weighed 44 lbs. caught between Massassaga Park and Ox Point, an old ground which has been fished for upwards of a century.

The Bay of Quinté bass breeding pond has proved a great success. The handling and transportation of live fish, by the officer of your department was also very successful, thousands of these bass being carried safely for hundreds of miles with comparatively small loss.

The trout fishing in the numerous small lakes, of my division, was very good, especially in Charleston, Marmora, Sydenham and other lakes along the Rideau River. St. Ola is the centre of several lakes where trout are also plentiful. Tourists have found good fishing with their up-to-date tackle for fishing in deep water.

With the exception of sturgeon which are almost extinct, all kinds of fish are on the increase. Pike especially so in the Bay of Quinte district.



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Nearly all the fish caught from Brighton to the head of the St. Lawrence (about one hundred miles), are shipped fresh to United States cities at fair prices, while every town and city on the Canadian side are furnished with fish from Manitoba, Georgian Bay or from the eastern provinces.

*Inspector O. B. Sheppard, of Toronto*, says that the catch of commercial fish in his division has been an average one, with the exception of herring and blue pickerel which has been exceptionally good. In the Lake Huron and Georgian Bay district, the trout, whitefish and yellow pickerel have been rather below the average of the last two years, while herring and blue pickerel have been considerably above. In the Lake Erie district the catch of whitefish shows a considerable falling off, and the trout practically nil, while the herring, both in quantity and size, have increased over last year. In Lake Ontario district the catch has been below the average in all kinds of fish, but especially in trout and whitefish.

During the summer I visited all the important fishing stations in my division, and found the law being fairly well observed, except in the Georgian Bay district, where illegal trap net fishing is being done to an alarming extent. The Provincial Government is doing something to stop the practice, but should, in my opinion, take more drastic measures than are taken at present to prevent it. I have visited a great many of the inland waters and made a careful study of the line and rod fishing, and am pleased to be able to say that they are holding up fairly well, and if proper care and protection is given, will continue to do so. I consider the inland fisheries or angling fisheries a most important one, as this is what brings the thousands of strangers to our shores, who spend large amounts of money among all classes. Every pound of fish that is caught by the angler or sportsman represents at least twenty times the value of the same number of pounds dealt with commercially. This part of our fisheries should be carefully guarded and properly protected, so that it will not deteriorate. The one great menace to the inland fisheries in my division is the rapid increase of the German carp. It is rapidly spreading over nearly all the waters, both inland and international, and I would advise that any and every means possible should be at once taken to prevent further increase. If drastic measures are not at once taken in this respect, the damage to our fisheries will be irreparable. The sturgeon, one of the most valuable fish in Canadian waters, is becoming scarcer every year. It can still be secured in some of the northern waters, and I would strongly recommend the transplanting of the parent fish to congenial waters, where they were formerly found (as they are very tenacious to life this could easily be done) and have them properly protected for a few years. If this were done I am satisfied the small cost incurred would be repaid a thousandfold.

*Inspector A. G. Duncan*, in charge of the western district of Ontario, says that he visited last summer the most important fishing points of this district, and found that there has been a good deal of illegal fishing carried on with trap nets and seines east from St. Joseph Island to Bustard Islands and Badgely Island. There will be a good increase especially in whitefish in the above grounds over the previous one. To a great extent this increased catch of whitefish may be ascribed to the illegal use of seines in the above locality. From Sault Ste. Marie west to Pilot Harbour on Lake Superior, the catch of trout compares well with that of previous years; up to September 1 it promised to be larger than in 1900, but after that date we had a succession of storms that made it impossible to fish regularly. In that locality whitefish will yield less than in 1900, and seems to be decreasing each year. Fish dealers informed me that these two kinds of



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fish are about the only ones they handle. This due to the fact that fishing in Lake Superior on the east coast is all deep water fishing, and these are the only kind of fish found in deep water.

I would recommend that some steps be taken to establish a fish hatchery at Sault Ste. Marie, where it could restock the waters of Lake Huron, Georgian Bay and Lake Superior, and it is possible the city would furnish free water, as such an institution would be a great attraction in the town.

## MANITOBA.

*Inspector W. S. Young, of Selkirk*, says when all the fishery returns are in, they will show an increase over the year 1900; while the catch of *whitefish* will not give much of an increase, *pickerel*, *tullibee* and *catfish* will show a very large surplus over last report. Catfish heretofore have not been caught here to any great extent, owing to the low price paid for them. The best price the fishermen could get was half a cent to one cent per pound, during last year the price averaged from  $2\frac{1}{2}$  to 3 cents per pound. The most of these fish are caught with hook and line in the Red River, and at the mouth of the above river in Lake Winnipeg. The half-breeds catch the most of these fish, and are making a good living out of the industry, which is a blessing to them, as they are enabled to buy flour and clothing for themselves and families. The cause of the demand for these fish is due to the falling off in the catch in the Mississippi river, as the most of these fish are shipped to that district. The tullibee catch has been the best for some years, and when the returns are in they will show a very large increase over the previous one. The next annual report will show a considerable value of fish over that of the previous year, which will bring it near the half million mark. With proper regulations for the protection of the fisheries in this province and enforcement, there is nothing to fear from depletion. The season's operations have been successful, both for the fishermen and the companies engaged.

## NORTH-WEST TERRITORIES.

*Inspector E. W. Miller, of Qu'Appelle*, says:—In general the Territorial waters have continued in excellent condition throughout the year and fish are reported plentiful in all districts. The catch of fish, however, will not be up to the average of former years. This is mainly due to two causes. In the settled districts farming operations have been so crowned with success as to prevent much resort to the fisheries, more remunerative employment being obtainable. In the northern districts the Indian and half-breed population, who generally more or less depends on fish for their livelihood, have found game more plentiful than usual. Along the Saskatchewan river especially the great abundance of muskrats has afforded very profitable occupation.

In the Edmonton district most of the lakes are now found again well stocked with fish, the reports from Lac la Biche, Lac St. Annes, and Pigeon lake being most encouraging. Both there and in the Prince Albert district, a high stage of water prevailed throughout the year, and many of the lesser lakes have gained considerably in volume. The sturgeon fishery at Cedar lake was closed for the summer season; the catch last winter was fairly good, and it will be exceeded during the present season, as the fish are

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reported very plentiful. At Lake Winnipegosis fishing was carried on vigorously throughout the winter and summer seasons. This is at present the only territory where whitefish and pickerel are fished for export on an extensive scale, and the operations are being carefully observed, so that the lake shall not be overfished.

The large rainfall has much improved the condition of the smaller lakes in Assiniboia, and fish are reported more plentiful in most. There is still, however, a deficiency of whitefish in some lakes once noted for their large output of that species. Long lake is in specially good condition. High water in the spring prevented the illegal fishing generally prevalent at that season, and no serious infractions of the regulations were reported.

## BRITISH COLUMBIA.

*Inspector C. B. Sword, for British Columbia*, states that the amount of salmon preserved in 1901 exceeds by nearly 200,000 cases the pack of 1897, the largest previously recorded, the total pack for this year being 1,224,491 cases. One-half of this increase is owing to the larger pack on the Fraser river obtained from the phenomenally large run of sockeyes (*O. Nerka*).

In 1900, when the total pack of sockeye was only 413,802 cases, there were 193,046 cases of the less marketable varieties, coho, spring, humpbacks and dog salmon, put up. In 1901 the total pack of these was only 78,360 cases. This smaller pack was chiefly owing to there being enough of sockeyes to fill the cans provided, but partly also to the fear of the canners that with the heavy pack of sockeyes there might be difficulty in finding a market for the cheaper varieties. The heavy run of sockeyes in 1901 occasioned also a heavy pack on Puget Sound, and the British Columbia canners complain that while they paid 10½ cents for fish to the gill net fishermen, their rivals on the Washington side were permitted to use traps and purse seines and secured their fish at a much lower price, the consequence being that while the present prices in the London and Liverpool markets would leave a profit to the Puget Sound canners, the British Columbia pack could not be sold except at a loss. There has been an increase of 2,981 barrels of salt salmon over the amount put up in 1900. The pack of dog salmon salted is 5,426,207 pounds, against 5,700,000 pounds in 1900. The amounts both of pickled and dry salted salmon put up in 1901 were affected by a shortage in the supply of salt. The returns for fresh salmon show an increase of over 400,000 pounds, the total being 2,142,805 pounds in 1901.

*Sturgeon* again shows a decrease, yielding only 65,000 pounds, against 105,000 in 1900. *Halibut* shows an increase, the return being 5,701,000 pounds in 1901, against 4,261,000 pounds in 1900,

*Seal fishery*.—The Collector of Customs at the port of Victoria reports the catch of fur seals for 1901 as 24,422, at a value of \$15 each, as against 35,523 in the previous season.

## CONCLUSION.

A perusal of the above concise reports from our inspectors will give a fair impression of the principal fluctuations of the various species in the different provinces during the season just closed, as compared with the previous yield of fish published in detail in this report.

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In the Maritime provinces, the catch, though an average one, will not be up to that of 1900. The falling off is more noticeable in the Cape Breton districts, where the development of other more permanent industries has recently attracted many who formerly sought the sea for a livelihood. Unfortunately the extraordinary capture of mackerel in the Northumberland Strait in 1900, the best in twelve years, was not repeated last season and only an average quantity was secured. However, the aggregate fishery production in New Brunswick and Prince Edward Island will, no doubt, exceed that of the year before. The Bay of Fundy herring fisheries were more productive than in 1900. The Gulf of St. Lawrence fisheries, especially the salmon on the north shore, will be above the average.

The inland districts, from Quebec to the Rockies, will hold their own in fishery matters, excepting perhaps in the North-west Territories, where a falling off is anticipated. In British Columbia, probabilities and conjectures make way to established facts, especially concerning the salmon industry, which this year eclipses by far the phenomenal output of 1897. No less than 58,785,000 cans of salmon were preserved there in 1901; besides 9,155,200 pounds of salted and fresh salmon. Unless the minor branches of fisheries have utterly failed, which is not likely, as halibut also shows a large improvement, British Columbia will in our next report supersede old Nova Scotia, which has always headed the list of fisheries.

With such figures in evidence it is safe to estimate that the aggregate value of Canada's fishery production for 1901 will be the largest in its records, exceeding twenty-three million dollars.

I have the honour to be, sir,  
Your obedient servant,

F. GOURDEAU, LT.-COL.,  
*Deputy Minister of Marine and Fisheries.*





## APPENDIX No. 1.

## EXPENDITURE AND REVENUE.

The total expenditure for all Fisheries services, except Civil Government, for the fiscal year ending June 30, 1901, including Fishing Bounty, amounted to \$491,569, being within the appropriation by \$69,342.

The total net fisheries revenue, during the same period, from rents, license fee, fines and sales, including the *modus vivendi* licenses to United States vessels, amounted to \$88,145.

Service.	Expenditure.	Vote.
	\$ cts.	\$ cts.
Fisheries.....	111,760 67	115,000 00
Fish-breeding.....	68,961 40	77,500 00
Fisheries protection service.....	124,211 21	154,297 50
Fishing bounty.....	158,802 50	160,000 00
Miscellaneous expenditure.....	27,833 79	54,113 90
Total .....	491,569 57	560,911 40

The details of the above will be found in the Auditor General's report under the proper headings.

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion.

Service.	Expenditure.	Amount.
	\$ cts.	\$ cts.
Fisheries, Ontario .....	3,819 57	
" Quebec.....	7,934 03	
" New Brunswick.....	28,452 51	
" Nova Scotia.....	35,730 69	
" Prince Edward Island.....	7,934 03	
" Manitoba.....	2,669 74	
" North-west Territories.....	6,351 39	
" British Columbia.....	17,886 36	
" Yukon.....	1,159 85	
General account.....	1,117 49	
Total .....		111,760 67

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This expenditure by provinces is subdivided as follows:—

## EXPENDITURE.

<i>Ontario.</i>		\$ cts.	\$ cts.
Salaries of officers.....		3,241 65	
Disbursements of officers.....		385 92	
Miscellaneous.....		192 00	
Total.....			3,819 57
<i>Quebec.</i>			
Salaries of officers.....		2,826 00	
Disbursements of officers.....		3,820 80	
Miscellaneous.....		6 16	
Total.....			6,652 96
<i>New Brunswick.</i>			
Salaries of officers.....		19,292 13	
Disbursements of officers.....		8,954 00	
Miscellaneous.....		206 38	
Total.....			28,452 51
<i>Nova Scotia.</i>			
Salaries of officers.....		19,799 14	
Disbursements of officers.....		15,753 09	
Miscellaneous.....		178 46	
Total.....			35,730 69
<i>Prince Edward Island.</i>			
Salaries of officers.....		5,156 92	
Disbursements of officers.....		2,746 71	
Miscellaneous.....		31 10	
Total.....			2,934 03
<i>Manitoba.</i>			
Salaries, of officers.....		1,894 71	
Disbursements of officers.....		647 03	
Miscellaneous.....		128 00	
Total.....			2,669 74
<i>North-west Territories.</i>			
Salaries of officers.....		5,669 25	
Disbursements of officers.....		2,777 79	
Miscellaneous.....		4 35	
Total.....			6,351 39
<i>British Columbia.</i>			
Salaries of officers.....		9,452 38	
Disbursements of officers.....		3,140 47	
Miscellaneous.....		5,273 51	
Total.....			17,866 51
<i>Yukon.</i>			
Salaries of officers.....		1,150 00	
Disbursements of officers.....		9 85	
General account.....			1,159 81
Total.....			1,117 49
			111,760 67

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## FISH-BREEDING.

Service.	Expenditure.	Amount.
	\$ cts.	\$ cts.
Fish-breeding, Ottawa hatchery.....	1,679 03	
" Newcastle ".....	3,952 55	
" Sandwich ".....	5,621 83	
" Tadoussac ".....	3,406 04	
" Gaspé ".....	5,858 29	
" Magog ".....	737 85	
" Restigouche ".....	5,216 46	
" Bedford ".....	1,971 22	
" Bay View ".....	4,063 27	
" Quinté Bass Pond hatchery.....	1,582 19	
" Miramichi hatchery.....	2,703 35	
" St. John River hatchery.....	3,272 94	
" Fraser River ".....	1,648 01	
" Selkirk ".....	4,174 53	
" Margaree ".....	5,160 33	
" Granite Creek ".....	16,061 76	
General account.....	1,851 75	
Total.....		68,861 40

## SALARIES, ETC.

<i>Newcastle Hatchery.</i>	\$ cts.	\$ cts.
Salaries.....	650 00	
Miscellaneous expenditure.....	3,302 55	
Total.....		3,952 55
<i>Sandwich Hatchery.</i>		
Salaries.....	900 00	
Miscellaneous expenditure.....	4,721 83	
Total.....		5,621 83
<i>Ottawa Hatchery.</i>		
Salaries.....	800 00	
Miscellaneous expenditure.....	879 03	
Total.....		1,679 03
<i>Tadoussac Hatchery.</i>		
Salaries.....	650 0	
Miscellaneous expenditure.....	2,756 0	
Total.....		3,406 04
<i>Gaspé Hatchery.</i>		
Miscellaneous expenditure.....		5,858 29
<i>Magog Hatchery.</i>		
Salaries.....	420 00	
Miscellaneous expenditure.....	317 85	
Total.....		737 85

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## FISH-BREEDING—Continued.

		\$	cts.	\$	cts.
<i>Restigouche Hatchery.</i>					
Salaries.....		800	00		
Miscellaneous expenditure.....		4,416	46		
Total.....				5,216	46
<i>Bedford Hatchery.</i>					
Salaries.....		450	00		
Miscellaneous expenditure.....		1,521	22		
Total.....				1,971	22
<i>Bay View Hatchery.</i>					
Salaries.....		450	00		
Miscellaneous expenditure.....		3,613	27		
Total.....				4,063	27
<i>Miramichi Hatchery.</i>					
Salaries.....		850	00		
Miscellaneous expenditure.....		1,853	35		
Total.....				2,703	35
<i>St. John River Hatchery.</i>					
Salaries.....		600	00		
Miscellaneous expenditure.....		2,672	94		
Total.....				3,272	94
<i>Selkirk Hatchery.</i>					
Miscellaneous expenditure.....				4,174	53
<i>Fraser River Hatchery.</i>					
Salaries.....		850	00		
Miscellaneous expenditure.....		798	01		
Total.....				1,648	01
<i>Quinte Bass Pond.</i>					
Miscellaneous expenditure.....				1,582	19
<i>Margaree.</i>					
Miscellaneous expenditure.....				5,160	33
<i>Granite Creek.</i>					
Miscellaneous expenditure.....				16,061	76
General account.....				1,851	75
Total.....				68,961	40



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## FISHERIES PROTECTION SERVICE—1900-1901.

		\$	cts.	\$	cts.
<i>Steamer 'Acadia.'</i>					
Wages of officers and men.....		7,931	67		
Provisions.....		2,584	80		
Fuel.....		3,280	14		
Repairs.....		9,412	75		
Miscellaneous.....		4,010	45		
Total .....				28,219	81
<i>Steamer 'La Canadienne.'</i>					
Wages of officers and men.....		6,959	03		
Provisions.....		1,227	26		
Fuel.....		2,525	85		
Repairs.....		3,346	77		
Miscellaneous expenditure.....		2,199	53		
Total .....				16,258	44
<i>Steamer 'Curlew.'</i>					
Wages of officers and men.....		6,584	59		
Provisions.....		2,326	21		
Fuel.....		1,984	56		
Repairs.....		3,252	71		
Miscellaneous expenditure.....		3,036	41		
Total .....				17,184	48
<i>Steamer 'Petrel.'</i>					
Wages of officers and men.....		6,606	35		
Provisions.....		1,698	67		
Fuel.....		1,127	32		
Repairs.....		777	57		
Miscellaneous expenditure.....		1,094	60		
Total .....				11,304	51
<i>Steamer 'Constance.'</i>					
Wages of officers and men.....		6,490	02		
Provisions.....		1,917	94		
Fuel.....		2,663	75		
Repairs.....		7,421	22		
Miscellaneous expenditure.....		1,932	53		
Total .....				20,425	46
<i>Schooner 'Osprey.'</i>					
Wages of officers and men.....		3,720	45		
Provisions.....		2,248	59		
Fuel.....		31	58		
Repairs.....		1,236	07		
Miscellaneous expenditure.....		975	94		
Total .....				8,212	63
<i>Schooner 'Kingfisher.'</i>					
Wages of officers and men.....		3,205	86		
Provisions.....		1,445	24		
Fuel.....		88	87		
Repairs.....		1,109	77		
Miscellaneous expenditure.....		714	74		
Total.....				6,564	48

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FISHERIES PROTECTION SERVICE—1900-1901—*Concluded.*

		\$	cts.	\$	cts.
<i>'Stanley.'</i>					
Wages of officers and men.		2,142	19		
Provisions.		1,137	75		
Fuel.		1,000	07		
Repairs.		58	66		
Miscellaneous expenditure.		118	67		
Total.				4,457	34
<i>'Brant.'</i>					
Wages of officers and men.		185	00		
Provisions.		600	54		
Fuel.		122	10		
Repairs.		286	59		
Miscellaneous expenditure.		89	32		
Total.				1,283	55
Construction of new steamers.				19,973	20
Fisheries Intelligence Bureau.				2,486	11
General account.				8,266	67
				144,636	67
Less amount paid by Customs Department for steamer <i>Constance</i> .				20,425	46
Net total.				124,211	21

## MISCELLANEOUS EXPENDITURE.

		\$	cts.
MISCELLANEOUS.			
Building fishways.		479	45
Legal and incidental expenses.		1,143	90
Canadian fisheries exhibit.		1,011	24
Expenditure in connection with the distribution of fishing bounties.		4,821	21
Surveys of oyster beds.		3,380	87
Issuing licenses to United States fishing vessels.		423	90
Cold storage.		12,674	72
Balance for counsel fees—Behring Sea Commission.		3,690	00
C. C. Carlton, refund of duties on fish and oil.		208	50
Total.		27,833	79

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STATEMENT of Fisheries Revenue paid to the credit of the Receiver General of Canada,  
for the Fiscal Year ended June 30, 1901.

	\$	cts.
Ontario, rents, license fees, fines, &c. . . . .	717	35
Quebec " . . . . .	4,738	92
Nova Scotia " . . . . .	6,595	94
New Brunswick " . . . . .	10,150	40
P. E. Island " . . . . .	1,525	30
Manitoba " . . . . .	1,103	00
N. W. Territories " . . . . .	816	55
British Columbia " . . . . .	52,960	35
Yukon Territory " . . . . .	406	00
	79,013	81
Less—Refunds . . . . .	47	20
	78,966	61
Licenses to U.S. fishing vessels . . . . .	9,178	50
Net Total . . . . .	88,145	11

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## COMPARATIVE STATEMENT of Expenditure and Revenue of the

Number.		1887-88.		1888-89.		1889-90.	
		Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Ontario.....	19,860 52	18,251 25	19,264 98	24,266 06	14,539 87	23,666 96
2	Quebec.....	13,463 37	5,394 99	12,991 63	3,380 79	9,670 94	5,409 81
3	New Brunswick.....	20,533 20	7,625 64	20,298 00	8,282 88	14,914 95	8,834 35
4	Nova Scotia.....	18,308 02	3,905 44	20,201 09	2,744 23	17,395 24	5,424 95
5	Prince Edward Island.....	3,402 51	.....	3,746 69	140 00	3,113 21	302 88
6	Manitoba & N. W. Territories.....	2,816 64	819 25	2,848 16	848 00	3,604 70	794 00
7	British Columbia.....	3,661 83	6,934 55	4,333 63	6,416 00	3,634 41	11,367 50
8	Fish-breeding and fishways.....	41,082 04	.....	41,315 12	352 50	39,126 91	.....
9	Fisheries Protection Service.....	77,102 98	.....	69,693 82	.....	64,434 66	1,176 38
10	Miscellaneous.....	13,498 56	.....	10,912 18	.....	9,313 92	.....
	Totals.....	213,729 67	42,931 12	205,605 30	46,440 46	178,748 81	56,976 83
	Fishing bounties.....	163,757 92	.....	149,990 63	.....	149,999 85	.....

		1894-95.		1895-96.		1896-97.	
		Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
11	General Account Fisheries.....	.....	.....	.....	.....	2,198 47	.....
12	Ontario.....	21,938 56	33,211 60	24,917 48	35,681 68	21,592 40	32,814 66
13	Quebec.....	12,459 34	8,836 18	11,870 43	8,160 98	12,910 80	7,876 12
14	New Brunswick.....	21,370 94	11,170 36	20,526 56	10,696 88	21,671 92	10,110 77
15	Nova Scotia.....	23,555 38	7,075 07	23,049 41	6,180 93	23,682 33	5,239 55
16	Prince Edward Island.....	3,796 58	3,312 30	3,555 87	2,161 85	3,744 36	2,032 25
17	Manitoba.....	6,178 71	2,458 80	6,915 20	2,256 69	1,908 14	1,719 00
18	North-west Territories.....	.....	.....	.....	.....	2,181 58	344 13
19	British Columbia.....	6,218 74	23,517 25	6,226 77	26,410 75	8,841 64	39,888 82
20	Fish-breeding.....	39,730 93	.....	38,050 41	.....	27,330 73	.....
21	Fisheries Protection Service.....	100,207 29	.....	102,021 72	.....	99,357 01	.....
22	Miscellaneous.....	24,619 86	.....	20,203 25	.....	62,777 30	.....
	Totals.....	260,076 33	89,581 56	257,237 10	91,549 76	280,197 01	100,025 30
	Fishing bounties.....	160,089 42	.....	163,567 99	.....	154,389 77	.....



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Fisheries Department, from July 1, 1887, to June 30, 1901.

1890-91.		1891-92.		1892-93.		1893-94.		
Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
15,540 30	26,517 70	15,155 83	25,368 90	20,116 91	30,623 09	22,634 37	28,632 82	1
10,666 98	3,642 14	10,917 36	4,742 76	11,761 34	7,471 70	11,692 82	7,211 82	2
16,082 77	7,193 69	15,707 98	6,334 83	15,721 05	7,831 53	18,522 94	8,333 24	3
17,844 19	5,582 65	18,755 86	3,357 42	19,444 22	6,782 02	20,420 81	5,296 27	4
3,242 25	667 00	1,835 65	166 00	2,847 60	304 10	3,078 55	980 15	5
3,609 03	1,234 00	3,593 43	1,079 00	3,932 96	1,661 68	5,331 29	926 99	6
4,220 53	12,859 02	6,158 17	8,192 48	5,490 60	40,264 00	5,283 21	25,337 90	7
39,496 45	1,286 50	43,957 74	178 00	47,322 49	.....	45,024 67	.....	8
83,050 16	1,934 49	93,397 40	.....	106,805 39	.....	115,147 59	.....	9
13,382 28	.....	17,449 06	.....	100,602 14	.....	34,892 19	.....	10
207,234 94	60,917 19	226,928 48	49,719 39	334,044 70	94,938 12	282,028 44	76,719 19	
165,967 22	.....	156,892 25	.....	159,752 15	.....	158,794 54	.....	
1897-98.		1898-99.		1899-00.		1900-01.		
Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
2,389 66	.....	2,632 12	.....	652 41	.....	1,117 49	.....	11
19,239 34	30,574 57	11,784 22	5,830 85	3,804 94	794 12	3,819 57	717 35	12
11,140 16	7,571 15	11,350 27	6,287 71	5,452 41	2,543 04	7,934 03	4,738 92	13
17,063 58	5,317 08	22,922 50	10,430 08	21,659 94	12,015 27	28,452 51	10,150 40	14
21,683 91	11,511 85	25,348 11	6,668 22	27,461 91	5,494 49	35,760 39	6,595 94	15
6,775 78	2,707 57	6,832 85	2,242 24	7,364 30	2,207 12	7,934 03	1,525 30	16
1,206 26	1,515 00	1,883 37	1,537 85	1,723 59	2,028 00	2,669 74	1,103 00	17
2,324 66	393 87	4,065 68	150 50	3,848 25	1,522 50	6,251 39	1,222 55	18
8,503 79	47,864 75	8,459 47	45,801 75	13,662 17	53,195 35	17,886 36	52,960 35	19
28,002 32	.....	34,522 57	.....	38,070 12	.....	68,961 40	.....	20
101,807 96	.....	105,133 27	.....	97,370 11	.....	124,211 21	.....	21
59,919 56	.....	23,207 73	.....	31,125 67	.....	27,833 79	.....	22
280,061 98	107,455 84	427,599 16	76,949 20	411,717 35	79,799 89	332,767 07	79,013 81	
157,504 00	.....	159,459 00	.....	160,000 00	.....	158,802 50	.....	

## APPENDIX No. 2

# FISHING BOUNTIES.

The payments made for this service are under the authority of Act 54-55 Vic., cap. 42, intituled : 'An Act to encourage the development of the sea fisheries and the building of fishing vessels,' which provides for the payment of the sum of \$160,000 annually, under regulations to be made from time to time by the Governor General in Council.

### REGULATIONS.

The regulations governing the payment of fishing bounties are as established by the following Order in Council dated December 10, 1897.

#### *Order in Council.*

AT THE GOVERNMENT HOUSE AT OTTAWA.

FRIDAY, the 10th day of December, 1897.

#### *Present :*

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the provisions of 'The Bounty Act, 1891', 54-55 Vic., toria, chapter 42, and by and with the advice of the Queen's Privy Council for Canada is pleased to order that the regulations governing the payment of fishing bounties established by order of the Governor in Council dated August 24, 1894, shall be and the same are hereby rescinded, and the following regulations substituted therefor :—

1. Resident Canadian fishermen who have been engaged in deep-sea fishing for fish other than shell-fish, salmon and shad, or fish taken in rivers, or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea-fish, shall be entitled to a bounty ; provided always, that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than 3 men (the owner incuded), will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound-nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets but are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may have fished in two vessels, or in a vessel and a boat, or in two boats.

4. The owners of boats measuring not less than 13 feet keel which have been engaged during a period of not less than three months in deep-sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels, owned and fitted out in Canada, of 10 tons and upwards (up to 80 tons) which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage which shall be paid to the owner or owners.

6. The three months during which a vessel must have been engaged in fishing, to be entitled to bounty, shall commence on the day the vessel sails from port on her fishing voyage and end the day she returns to port from said voyage.

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7. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of Customs or Fishery Overseer, said license to be attached to the claim when sent in for payment.

8. Dates and localities of fishing must be stated in the claim, as well as the quantity and kinds of sea-fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.

11. Claims must be filed on or before November 30 in each year.

12. Officers authorized to receive claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fisheries.

13. No claim in which an error has been made by the claimant or claimants shall be amended after it has been signed and sworn to as correct.

14. Any person or persons detected making returns that are false or fraudulent in any particular will be debarred from any further participation in the bounty, and be prosecuted according to the utmost rigour of the law.

15. The amount of the bounty to be paid to fishermen and owners of boats and vessels will be fixed from time to time by the Governor in Council.

16. All vessels fishing under bounty license are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main-topmast head. The flag must be four feet square in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

JOHN J. MCGEE,  
Clerk of the Privy Council.

The bounty for the year 1900 was distributed on the basis authorized by the following Order in Council.

AT THE GOVERNMENT HOUSE AT OTTAWA,  
MONDAY the 21st day of January, 1901.

*Present :*

HIS EXCELLENCY IN COUNCIL.

His Excellency, in virtue of the provisions of the Act 54-55 Victoria, chapter 42, intituled : 'An Act to amend chapter 96 of the Revised Statutes, intituled an Act to encourage the development of the Sea Fisheries and the building of fishing vessels,' and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the sum of one hundred and sixty thousand dollars payable under the provisions of the said Act shall be distributed for the year 1900-1901, upon the following basis, and the same is hereby ordered accordingly :

Vessels : The owners of vessels entitled to receive bounty shall be paid one dollar (\$1) per registered ton, provided, however, that the payment to the owner of any one vessel shall not exceed the sum of eighty dollars (\$80) and all vessel fishermen entitled to received bounty, shall be paid the sum of \$6.50 each.

Boats : Fishermen engaged in fishing in boats, who shall also have complied with the regulations entitling them to receive the bounty, shall be paid the sum of Three dollars and fifty cents (\$3.50) each, and the owners of fishing boats shall be paid one dollar (\$1.00) per boat.

JOHN J. MCGEE,  
Clerk of the Privy Council.

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There were received for the year 1900, 13,771 claims, a decrease of 122 compared with the year 1899.

The number of claims paid during the year was 13,776, being an increase of 148 as compared with the previous year. This includes a number of claims held over from 1899.

There were \$68,721 in bounties paid to vessels and their crews, and \$90,081.50 to boats and boat fishermen, making the total bounty paid during the year 1900-1901, \$158,802.50.

The number of vessels which received bounty during the year was 802, the total tonnage being 26,639 tons, showing an increase of 13 vessels and 100 tons, as compared with the previous year.

Bounty was paid on 12,974 boats, and to 22,031 boat fishermen during the year, being an increase of 135 boats and 293 fishermen, over 1899.

DETAILED STATEMENT of Fishing Bounty Claims received and paid during the year 1900.

Province.	County.	Number of Claims received.	Number of Claims rejected.	Number of Claims paid.
Nova Scotia	Annapolis.....	131		131
	Antigonish.....	122		*133
	Cape Breton.....	440	12	*438
	Cumberland.....	5	1	4
	Digby.....	456	6	450
	Guysborough.....	1,082	4	*1,075
	Halifax.....	1,517	8	1,509
	Inverness.....	426	1	*427
	King's.....	55	6	*50
	Lunenburg.....	1,032	2	1,030
	Pictou.....	23	19	*17
	Queen's.....	170	2	168
	Richmond.....	819	3	*818
	Shelburne.....	619	1	*621
New Brunswick	Victoria.....	376	1	375
	Yarmouth.....	206		206
	Totals.....	7,484	66	7,452
	Charlotte.....	428	1	*429
	Gloucester.....	352		*353
	Kent.....	61		61
	Northumberland.....	7		7
	Restigouche.....	1		1
	St. John.....	55	2	53
	Totals.....	904	3	904
Prince Edward Island	King's.....	538	6	*555
	Prince.....	456	17	*490
	Queen's.....	125	1	124
	Totals.....	1,119	24	1,169
Quebec	Bonaventure.....	859	3	*864
	Gaspé.....	2,554	3	*2,564
	Rimouski.....	69	29	40
	Saguenay.....	782	3	*783
	Totals.....	4,264	38	4,251
Grand totals.....		13,771	131	*13,776

\*NOTE.—The number of claims paid include several applications for previous years, which explains the difference between claims paid and claims received, after deducting those rejected.



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## DETAILED STATEMENT of Fishing Bounties paid to Vessels in each County for the Year 1900.

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount paid.
						\$ cts.
Nova Scotia .....	Annapolis .....	13	304	23·38	78	811 00
	Antigonish .....	1	10	10	3	29 50
	Cape Breton .....	15	254	16·53	61	650 50
	Cumberland .....	2	34	17	6	73 00
	Digby .....	58	1,734	29·89	475	4,821 50
	Guysborough .....	28	685	24·46	150	1,660 00
	Halifax .....	58	1,425	24·57	340	3,635 00
	Inverness .....	25	331	13·24	124	1,137 00
	King's .....	2	33	16·50	5	67 00
	Lunenburg .....	170	12,540	73·76	2,717	30,200 50
	Pictou .....					
	Queen's .....	9	136	15·11	38	383 00
	Richmond .....	48	1,370	28·54	337	3,560 50
	Shelburne .....	57	1,902	33·36	541	5,418 50
	Victoria .....	2	22	11	7	67 50
	Yarmouth .....	37	1,694	45·78	470	4,749 00
	Totals .....	525	22,474	42·61	5,352	57,263 50
New Brunswick .....	Charlotte .....	40	651	16·27	146	1,600 00
	Gloucester .....	184	2,162	11·75	707	6,759 00
	Kent .....					
	Northumberland .....	4	49	12·25	14	133 00
	Restigouche .....	1	26	26	4	52 00
	St. John .....	5	81	16·20	19	204 50
	Totals .....	234	2,969	12·68	890	8,748 50
Prince Edward Island.	King's .....	21	559	26·62	122	1,376 50
	Prince .....	7	161	23	25	323 50
	Queen's .....	1	17	17	6	56 00
	Totals .....	29	737	25·41	153	1,756 00
Quebec .....	Bonaventure .....					
	Gaspé .....	4	109	27·25	20	239 00
	Rimouski .....					
	Saguenay .....	10	350	35	56	714 00
	Totals .....	14	459	32·78	76	953 00
	Grand totals .....	802	26,639	33·21	6,471	68,721 00

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DETAILED STATEMENT of Fishing Bounties paid to Boats in each County for the Year 1900, showing also total amount paid to Vessels and Boats for the Year.

Province.	County.	Number of Boats.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1900.
				\$ cts.	\$ cts.
Nova Scotia .....	Annapolis .....	118	188	776 00	1,587 00
	Antigonish .....	132	193	807 50	837 00
	Cape Breton .....	423	743	3,023 50	3,674 00
	Cumberland .....	2	5	19 50	92 50
	Digby .....	392	717	2,901 50	7,723 00
	Guysborough .....	1,047	1,652	6,829 00	8,489 00
	Halifax .....	1,451	1,932	8,213 00	11,848 00
	Inverness .....	402	842	3,349 00	4,486 00
	King's .....	48	71	296 50	363 50
	Lunenburg .....	860	1,004	4,374 50	34,574 50
	Pictou .....	17	30	122 00	122 00
	Queen's .....	159	281	1,142 50	1,525 50
	Richmond .....	770	1,169	4,861 50	8,422 00
	Shelburne .....	564	964	3,938 00	9,356 50
	Victoria .....	373	591	2,441 50	2,509 00
	Yarmouth .....	169	263	1,089 50	5,838 50
	Totals .....	6,927	10,645	44,184 50	101,448 00
New Brunswick .....	Charlotte .....	389	609	2,520 50	4,120 50
	Gloucester .....	169	387	1,523 50	8,282 50
	Kent .....	61	99	407 50	407 50
	Northumberland .....	3	8	31 00	164 00
	Restigouche .....				52 00
	St. John .....	48	81	331 50	536 00
	Totals .....	670	1,184	4,814 00	13,562 50
Prince Edward Island. ...	King's .....	534	790	3,299 00	4,675 50
	Prince .....	483	1,127	4,427 50	4,751 00
	Queen's .....	123	281	1,106 50	1,162 50
	Totals .....	1,140	2,198	8,833 00	10,589 00
Quebec .....	Bonaventure .....	864	1,533	6,229 50	6,229 50
	Gaspé .....	2,560	5,091	20,377 50	20,616 50
	Rimouski .....	40	54	229 00	229 00
	Saguenay .....	773	1,326	5,414 00	6,128 00
	Totals .....	4,237	8,004	32,250 00	33,203 00
	Grand totals .....	12,974	22,031	90,081 50	158,802 50

## GENERAL STATISTICS.

The fishing bounty was first paid in 1882.

The payments were made each year on the following basis :—

1882, vessels \$2 per ton, one half to the owner and the other half to the crew.  
Boats at the rate of \$5 per man, one-fifth to the owner and four-fifths to the men.

1883, vessels \$2 per ton, and boats \$2.50 per man, distributed as in 1882.

1884, vessels \$2 per ton, as in 1882 and 1883.

Boats from 14 to 18 feet keel.....	\$1 00
do 18 to 25 do .....	1 50
do 25 feet keel upwards.....	2 00

And boat fishermen \$3 each.

1885, 1886 and 1887, vessels \$2 per ton as in previous years. Boats measuring 13 feet keel having been admitted in 1885, the rates were :—Boats from 13 to 18 feet keel, \$1 ; from 18 to 25 feet keel, \$1.50 ; from 25 feet keel upwards, \$2, and fishermen \$3 each.

1888, vessels \$1.50 per ton, one half each to owner and crew. Boats, the same as in 1885, 1886 and 1887.

1889, 1890 and 1891, vessels \$1.50 per ton as in 1888. Boats \$1 each. Boat fishermen \$3.

1892, vessels \$3 per ton, one half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1893, vessels \$2.90 per ton, paid as formerly. Boats \$1 each. Boat fishermen \$3.

1894, vessels \$2.70 per ton, distributed as in previous years. Boats \$1 each. Boat fishermen \$3.

1895, vessels \$2.60 per ton, half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1896, vessels \$1 per ton, which was paid to the owners, and vessel fishermen \$5 each, clause 5 of the regulations having been amended accordingly. Boats \$1 each, and boat fishermen \$3.50 per man.

1897, vessels \$1 per ton, and vessel fishermen \$6 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1898, vessels \$1 per ton, and vessel fisherman \$6.50 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1899, vessels \$1 per ton and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1900, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat fishermen \$3.50 per man.

Since 1882, 15,445 vessels, totalling a tonnage of 556,027 tons, have received the bounty. The total number of vessel fishermen which received bounty is 118,336, being an average of nearly 8 men per vessel.

The total number of boats to which bounty was paid since 1882 is 264,377, and the number of fishermen 490,984. Average number of men per boat, 2.

The highest bounty paid per head to vessel fishermen was \$21.75 in 1893 ; the lowest 83 cents, while the highest to boat fishermen was \$4, the lowest \$2.

The general average paid per head is \$4.92.

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COMPARATIVE STATEMENT by Provinces for the Years 1882 to 1900, inclusive, showing :—  
 (1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882.....	6,730	6,613	1,257	1,142	1,169	1,100	3,162	3,117	12,318	11,972
1883.....	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884.....	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885.....	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886.....	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887.....	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888.....	8,481	8,429	2,065	2,026	1,153	834	4,328	4,310	16,027	15,599
1889.....	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,652	17,119	17,078
1890.....	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18,071	17,959
1891.....	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,506
1892.....	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893.....	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894.....	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895.....	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896.....	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
1897.....	8,450	8,418	1,042	991	1,175	1,171	4,180	4,149	14,847	14,729
1898.....	8,446	8,347	934	917	1,143	1,145	4,171	4,092	14,679	14,501
1899.....	7,894	7,754	849	825	1,016	947	4,134	4,102	13,893	13,628
1900.....	7,484	7,452	904	904	1,119	1,169	4,264	4,251	13,771	13,776
Totals.....	155,875	154,579	28,203	26,694	21,525	20,973	78,986	77,678	284,589	279,924

(2) NUMBER of vessels, tonnage and number of men which received Bounty in each year.

YEAR.	NOVA SCOTIA.			NEW BRUNSWICK.			P. E. ISLAND.			QUEBEC.			TOTAL.		
	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.
1882....	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,486
1883....	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,243
1884....	700	29,828	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,361
1885....	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,823
1886....	562	25,375	5,022	145	2,628	520	32	1,071	215	52	1,730	320	791	30,804	6,077
1887....	566	24,520	4,900	154	2,889	563	38	1,677	338	54	1,883	334	812	30,969	6,135
1888....	589	26,008	5,450	150	2,545	544	37	1,245	246	51	1,842	388	827	31,640	6,631
1889....	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,818
1890....	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,805
1891....	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,665
1892....	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,252
1893....	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,744
1894....	602	24,735	5,077	238	3,189	721	21	594	114	38	1,066	178	899	29,584	6,090
1895....	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,250
1896....	553	23,415	4,607	250	3,337	800	23	656	114	36	1,143	144	862	28,551	5,665
1897....	507	21,323	4,829	239	3,079	816	20	490	109	24	833	116	790	25,725	5,870
1898....	508	20,868	4,840	239	3,155	859	24	561	125	16	524	77	784	25,108	5,901
1899....	519	22,538	5,323	238	3,131	885	15	373	76	17	497	78	789	26,539	6,362
1900....	525	22,474	5,352	234	2,969	890	29	737	153	14	459	76	802	26,639	6,471
Totals.	10,858	465,772	99,017	3,366	50,086	11,845	483	15,138	2,854	741	25,031	4,624	15,445	556,027	118,336



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## (3) NUMBER of Boats and boat fishermen which received Bounty in each year.

Year.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.
1882	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,446
1883	6,458	13,553	1,453	3,309	1,098	3,106	3,226	6,188	12,275	26,156
1884	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,936
1885	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,741
1886	7,140	13,351	1,618	3,567	1,048	2,547	4,303	7,981	14,109	27,446
1887	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,252
1888	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,256
1889	7,926	14,118	2,237	5,032	1,475	3,568	4,602	8,807	16,240	31,525
1890	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,245
1891	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,507
1892	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,812
1893	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,269
1894	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,132
1895	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,558
1896	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,821
1897	7,911	12,542	752	1,351	1,151	2,147	4,125	7,572	13,939	23,612
1898	7,872	12,438	678	1,237	1,121	2,199	4,076	7,627	13,747	23,501
1899	7,235	11,305	587	1,027	932	1,710	4,085	7,696	12,839	21,738
1900	6,927	10,645	670	1,184	1,140	2,198	4,237	8,004	12,974	22,031
Totals.....	143,825	249,063	23,273	49,853	20,399	46,889	76,880	145,179	264,377	490,984

## (4) TOTAL Number of men receiving Bounty in each year.

Year.	NOVA SCOTIA.	NEW BRUNSWICK.	P. E. ISLAND.	QUEBEC.	Total.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882	17,473	3,061	3,144	6,254	29,932
1883	19,791	3,805	3,172	6,631	33,399
1884	18,996	3,065	2,438	6,798	31,297
1885	19,293	3,750	2,719	7,802	33,564
1886	18,373	4,087	2,762	8,301	33,523
1887	18,897	4,557	3,049	7,884	34,387
1888	19,565	4,692	2,390	8,240	34,887
1889	19,802	5,597	3,807	9,137	38,343
1890	20,673	5,689	3,227	9,461	39,050
1891	21,170	4,537	3,582	9,570	38,859
1892	16,918	2,108	2,186	7,852	29,064
1893	16,528	1,948	2,113	7,424	28,013
1894	17,976	2,002	1,927	7,317	29,222
1895	18,290	2,198	2,270	8,050	30,808
1896	17,061	2,353	2,240	7,832	29,486
1897	17,371	2,167	2,256	7,688	29,482
1898	17,278	2,096	2,324	7,704	29,402
1899	16,628	1,912	1,786	7,774	28,100
1900	15,997	2,074	2,351	8,080	28,502
Totals.....	348,080	61,698	49,743	149,799	609,320

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## (5) TOTAL annual payments of Fishing Bounty.

Year.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1882.....	106,098 72	16,997 00	16,137 00	33,052 75	172,285 47
1883.....	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884.....	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885.....	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886.....	98,789 54	17,894 57	10,935 87	33,283 61	160,903 59
1887.....	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888.....	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889.....	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890.....	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891.....	92,377 42	17,235 96	12,771 30	34,507 17	156,891 85
1892.....	109,410 39	10,864 61	9,782 79	29,694 35	159,752 14
1893.....	108,060 67	12,524 09	9,328 62	28,320 72	158,234 10
1894.....	111,460 03	12,690 80	7,875 79	28,040 18	160,066 80
1895.....	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896.....	98,048 95	13,602 88	9,745 50	32,992 44	154,389 77
1897.....	102,083 50	13,454 50	9,809 00	32,157 00	157,504 00
1898.....	103,730 00	13,746 00	10,188 00	31,795 00	159,459 00
1899.....	106,598 50	13,514 50	7,822 00	32,065 00	160,000 00
1900.....	101,448 00	13,562 50	10,589 00	33,203 00	158,802 50
Totals.....	1,918,016 39	291,175 87	199,520 07	591,459 10	3,000,171 43

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List of Vessels which received Fishing Bounty for the Year 1900.

## PROVINCE OF NOVA SCOTIA.

## ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
80093	Anna K.....	St. John, N.B..	14	Edward Fales.....	Margaretsville..	4	40 00
111526	Annie May.....	Digby.....	11	David Sabeau.....	Port Lorne.....	4	37 00
88396	Brant.....	Windsor.....	12	Amos B. Lewis.....	".....	4	38 00
107291	Elva J. Hayden....	Annapolis.....	65	David Hayden.....	Lower Granville..	15	162 50
36569	Hope.....	Halifax.....	34	Elias Hudson.....	Parker's Cove....	6	73 00
107478	Jessie C.....	Digby.....	10	Lewis Sabeau.....	Port Lorne.....	2	23 00
83461	Josie L. Day.....	".....	16	Albert Coates.....	Hillsburn.....	6	55 00
42089	Lily.....	St. Andrews....	10	James Aldred.....	Margaretsville..	2	23 00
85682	Malapert.....	Digby.....	23	Wm. Ellis.....	Victoria Beach..	8	75 00
83253	Rescue.....	Annapolis.....	17	Josiah Burrell.....	Clementsport....	5	49 50
100314	Sea Fox.....	Yarmouth.....	19	Israel W. Banks....	Port Lorne.....	4	45 00
107293	S. V. H.....	Annapolis.....	49	John S. Hayden....	Victoria Beach..	15	146 50
90658	Whistler.....	St. John, N.B..	24	Lewis R. Morris....	Clementsport....	3	43 50

## ANTIGONISH COUNTY.

90642	Komaroff.....	Yarmouth.....	10	John Brow.....	Harb'r auBouche	3	29 50
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## CAPE BRETON COUNTY.

100389	Annie F.....	Sydney.....	13	John Farrell.....	Main-à-Dieu....	5	45 50
100221	Baleka.....	Halifax.....	31	Philip Berge.....	North Sydney..	8	83 00
100372	Betsy Jane.....	Sydney.....	11	Samuel Moore.....	Little Bras d'Or.	4	37 00
85381	Champion.....	".....	19	John Williams....	Louisburg.....	4	45 00
107372	Emerald.....	".....	15	Ephraim Burke....	Lingan.....	6	54 00
75571	Fanny.....	Liverpool.....	16	W. J. Christie....	North Sydney..	5	48 50
100383	Florence L.....	Sydney.....	10	Vital Arsenault....	Little Bras d'Or.	5	42 50
85382	G. H. Marryatt....	Halifax.....	24	Ambrose Allan....	North Sydney..	*	24 00
83306	I. O. N. A.....	".....	26	Chas. Pike.....	".....	2	39 00
88463	Maria.....	Arichat.....	14	Harry McDonald..	Little Glace Bay	3	33 50
92600	Merit.....	Sydney.....	13	Alex. LeBlanc....	Little Bras d'Or.	4	39 00
107358	Olive A.....	".....	19	Robert B. Spencer..	Port Morien....	3	38 50
107360	Ovands.....	".....	11	Patrick Campbell..	Main-à-Dieu....	3	30 50
100566	Rob S.....	Halifax.....	21	Ambrose Forward..	Lingan.....	6	60 00
107358	Victoria.....	Sydney.....	11	James Turner.....	Little Glace Bay	3	30 50

## CUMBERLAND COUNTY.

59375	Cadet.....	St. Andrews....	19	Abner Neves.....	W. Apple River.	2	32 00
100746	Sarah Jane.....	Windsor.....	15	De Wilton Holmes..	Parrsboro'.....	4	41 00

## DIGBY COUNTY.

107476	Addie B.....	Digby.....	13	Chas. H. Bailey....	Westport.....	4	39 00
90660	Alice May.....	Yarmouth.....	18	Charles Teed.....	Freeport.....	9	76 50
88598	Alph B. Parker....	St. John.....	47	Holland Outhouse..	Tiverton.....	12	125 00
94696	Annie M. Sproul..	Digby.....	70	Orbin Sproul.....	Digby.....	16	174 00

\* Crew not entitled to bounty.

1-2 EDWARD VII., A. 1902

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*DIGBY COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
100547	B and C.....	Digby.....	14	Loran Perry.....	Freeport.....	5	46 50
94698	Carrie H.....	".....	20	Elmer Gower.....	Westport.....	8	72 00
94704	Charles Haskell.....	".....	67	Howard Anderson.....	Digby.....	15	164 50
74331	Condor.....	".....	11	Howard Titus.....	Westport.....	5	43 50
103181	Curlew.....	".....	63	Joseph F. Milberry.....	Digby.....	14	154 00
107474	Dorothy.....	".....	59	M. G. Crocker.....	Freeport.....	16	163 00
103749	Emerald.....	".....	29	John H. Syda.....	Digby.....	6	68 00
77740	Elmer.....	".....	15	Norman Apt.....	".....	8	67 00
107604	Emma D.....	Weymouth.....	20	Frank S. Doucett.....	Salmon River.....	6	59 00
94707	Ernest F. Norwood.....	Digby.....	79	Joseph E. Snow.....	Digby.....	14	170 00
107475	Ethel May.....	".....	16	Reuben E. Hudson.....	".....	5	48 50
75757	Etta.....	".....	17	Clarence Webber.....	Westport.....	6	56 00
74329	Fairy Queen.....	".....	13	Wallace Coggins.....	Westport.....	5	45 50
100891	Fleur de Lis.....	Weymouth.....	17	Chas. W. Pyne.....	Little River.....	3	36 50
100315	Freddie A.....	Yarmouth.....	10	Norman Gregory.....	Digby.....	4	36 00
80798	Freddie G.....	Digby.....	18	George Gower.....	Westport.....	7	63 50
77963	Freeman Colgate.....	St. Andrews.....	26	Stewart Hicks.....	".....	10	91 00
90436	Genesta.....	Barrington.....	32	George Denton.....	".....	13	116 50
94835	George Linwood.....	Digby.....	25	Herbert Johnstone.....	Digby.....	7	70 50
107480	Hattie & Eva.....	".....	11	Edwin Haines.....	Freeport.....	4	37 00
100544	Helen Maud.....	".....	26	Chas. McDormand.....	Westport.....	7	71 50
77786	Hesperus.....	Halifax.....	17	John A. Powell.....	".....	2	30 00
100064	Isma.....	Digby.....	31	Stewart Hicks.....	".....	11	102 50
111525	James W. Cousins.....	".....	80	Joseph F. Milberry.....	Digby.....	7	125 50
88587	Jessie May.....	Yarmouth.....	14	Larion P. Robicheau.....	Meteghan.....	5	46 50
77957	Kedron.....	Digby.....	22	Isaiah Kinghorn.....	Digby.....	4	48 00
59388	Letitia.....	St. Andrews.....	10	Peter H. Belliveau.....	Belliveau's Cove.....	4	36 00
85690	Lora T.....	Digby.....	15	Judson D. Thurber.....	Freeport.....	7	60 50
100487	Mabel B.....	".....	57	M. G. Crocker.....	".....	12	135 00
107605	Mabel M.....	Weymouth.....	20	Leazine Boudreau.....	Cape Cove.....	4	46 00
107479	Marguerite.....	Digby.....	24	Orbin Sproul.....	Digby.....	9	82 50
88583	Mary Odell.....	Yarmouth.....	14	John T. Therrio.....	Meteghan.....	6	53 00
103184	Maryflower.....	Shelburne.....	26	G. C. Stevens.....	Freeport.....	8	78 00
107477	Maudie Ellen.....	Digby.....	14	Leander Hudson.....	Digby.....	4	40 00
100574	Melrose.....	Lunenburg.....	71	Augustus Haycock.....	Westport.....	16	175 00
92640	Minerva.....	".....	80	E. C. Bowers.....	".....	16	184 00
80794	Minnie C.....	Digby.....	18	L. H. Outhouse.....	Tiverton.....	5	50 50
85533	Minnie C.....	Yarmouth.....	12	Edwin Haines.....	Freeport.....	6	51 00
100895	New Home.....	Weymouth.....	31	Moses Thibaudeau.....	Church Point.....	10	96 00
83132	On Time.....	Digby.....	19	Henry Glavin.....	Westport.....	5	51 50
100319	Restless.....	".....	25	Charles Shaw.....	Centreville.....	7	70 50
100539	Rob Roy.....	Yarmouth.....	12	Moses T. Theriault.....	Meteghan.....	7	57 50
85558	Rowena.....	Digby.....	10	Warren Snow.....	Smith's Cove.....	3	29 50
100609	S. A. Crowell.....	Yarmouth.....	23	Wallace Gower.....	Westport.....	9	81 50
94694	Swan.....	Shelburne.....	56	Milton Haines.....	Freeport.....	12	134 00
103711	Utah and Eunice.....	Digby.....	33	Edwin Haines.....	".....	9	91 50
94832	Venite.....	Yarmouth.....	16	Stephen A. Doucette.....	Cape Cove.....	8	68 00
100811	Venus.....	St. Andrews.....	42	Edwin Haines.....	Freeport.....	14	133 00
100548	Vesta Pearl.....	Digby.....	40	Churchill Sollows.....	Tiverton.....	7	85 50
88264	Violetta.....	".....	11	Bernard Longmire.....	Digby.....	7	56 50
75595	Walter J. Clarke.....	".....	20	John W. Ellis.....	".....	6	59 00
103704	West Wind.....	".....	25	George Post.....	".....	9	83 50
100543	Whisper.....	Yarmouth.....	31	Wm. McGrath.....	".....	9	89 50
	W. Parnell O'Hara.....	Digby.....	79	Wm. Snow.....	".....	18	196 00

## GUYSBORO COUNTY.

90866	Alice.....	Lunenburg.....	12	Herbert O. Rudolph.....	Beckerton.....	4	38 00
107992	Alice J. Davis.....	Canso.....	20	Edward Hearn.....	Canso.....	7	65 50
90426	Amanda.....	Barrington.....	38	F. H. Hawes.....	".....	8	90 00



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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*GUYSBORO COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
41771	Atalia.....	Guysboro.....	34	Jesse M. Hunson.....	Mulgrave.....	4	60 00
103321	Christie Campbell..	Port Hawkesbury	55	Thomas H. Peeples...	".....	1	61 50
107993	Florence May.....	Canso.....	11	Wentworth G. Mathews	Canso.....	5	43 50
83180	Friend.....	Halifax.....	17	Thurlo Munroe.....	White Head...	6	56 00
94963	Golden Seal.....	".....	32	Edward B. Pelrine...	Larry's River...	6	71 00
107996	Green Linnet.....	Canso.....	12	John D. Ryan.....	Canso.....	5	44 50
100815	Happy Home.....	Barrington.....	10	Samuel Snow.....	White Head...	5	42 50
85569	Jessie B.....	".....	36	Hubert Richard.....	Charlo's Cove...	5	68 50
57715	John Lawrence.....	Halifax.....	23	Henry A. Richard.....	".....	8	75 00
100835	Lottie B.....	Lunenburg.....	12	Robert Mathews.....	Queensport....	6	51 00
107995	Maggie M. F.....	Canso.....	15	James Fitzgerald.....	".....	5	47 50
75577	Mary Ann Bell.....	Lunenburg.....	33	Joseph O'Neill.....	Auld's Cove.....	5	65 50
103859	Mary May.....	Halifax.....	23	Benjamin David.....	Port Felix.....	8	75 00
100446	Minnie May.....	Canso.....	12	Wm. L. Dort.....	Sandy Cove.....	5	44 50
100450	Minto.....	".....	18	Wm. O'Hara.....	Canso.....	6	57 00
103323	Nita.....	Pt. Hawkesbury..	22	Lewis Maguire.....	Mulgrave.....	1	28 50
100241	Pansy.....	Halifax.....	32	George Pace.....	Marie Joseph...	8	84 00
100231	Pearl.....	".....	17	Martin Meagher.....	Canso.....	3	36 50
75892	Peter Mitchell.....	Pt. Hawkesbury..	26	Michael Power.....	Mulgrave.....	2	39 00
111471	Quickstep.....	Arichat.....	80	J. W. Sproul.....	Canso.....	13	164 50
74139	Sadie.....	Halifax.....	44	Joseph Fougere.....	Larry's River...	7	89 50
100444	Stella May.....	Canso.....	12	James Meagher.....	Canso.....	4	38 00
100448	Surprise.....	".....	15	John J. Meagher.....	".....	4	41 00
107994	True Love.....	".....	10	David Walsh.....	".....	2	23 00
107991	Two Brothers.....	".....	14	Frederick Jello.....	Port Felix.....	7	59 50

## HALIFAX COUNTY.

100846	Albatross.....	Lunenburg.....	26	John Sullivan.....	Herring Cove...	7	71 50
107313	Alice A.....	Halifax.....	16	Alexander Fillis.....	W. Chezzetcook.	3	35 50
103507	Annie.....	".....	16	Charles Covey.....	Indian Harbour.	3	35 50
90495	Annie S.....	".....	34	J. J. Scott.....	East Dover.....	5	66 50
103858	B. & B. Holland..	".....	26	Richard Holland.....	Portuguese Cove	8	78 00
94662	Bessie Florence...	".....	12	Chas. W. Twohig.....	Pennant.....	4	38 00
90496	Black Prince.....	".....	18	George Julien.....	W. Chezzetcook.	3	37 50
103537	Bonacord.....	".....	12	Jas. W. Smith.....	Sambro.....	2	25 00
90721	Brilliant Star.....	".....	36	Peter Hartlin.....	East Jeddore...	8	88 00
94643	Carrie M. C.....	Lunenburg.....	39	Simeon Coolen.....	Hubbard's Cove.	12	117 00
100819	David James.....	Halifax.....	27	John C. Martin.....	Ketch Harbour..	7	72 50
103852	Dawn.....	".....	13	T. & J. Parker.....	Owls Head.....	2	26 00
59484	Day Spring.....	".....	36	George L. Baker.....	West Jeddore...	1	42 50
90481	Ella D.....	".....	32	Archibald Darrach, sr.	Herring Cove...	11	103 50
85738	Emma F.....	Lunenburg.....	13	Eliza Cook.....	Halifax.....	3	32 50
107320	Eva Gertrude.....	Halifax.....	34	Andrew Sullivan...	Herring Cove...	11	105 50
96785	Eva M. B.....	".....	45	Daniel Bonang, et al..	W. Chezzetcook.	5	77 50
92564	Evangeline.....	".....	23	Lewis Murphy.....	Pleasant Harbr.	5	55 50
100247	Fairy Queen.....	".....	11	Geo. H. Nickerson...	Sambro.....	3	30 50
100259	Florence G.....	".....	15	Caleb Gray.....	".....	5	47 50
80996	Gertie Belle.....	Guysboro.....	15	James Yorke.....	Eastern Passage.	3	34 50
97088	Glendale.....	Lunenburg.....	38	Simeon Conrod et al..	Seaforth.....	13	122 50
107319	Globe.....	Halifax.....	32	Charles W. Hart.....	Sambro.....	10	97 00
100228	Golden Dawn.....	".....	46	Edward Conrod et al..	E. Chezzetcook..	11	117 50
103544	Grace D.....	".....	10	James Maryatt.....	Pennant.....	3	29 50
88220	Grandee.....	".....	14	John P. Slaunwhite...	Terence Bay...	4	40 00
90489	Greenleaf.....	".....	45	Angus Julien et al..	".....	11	116 50
107983	John J. Hayes.....	Shelburne.....	56	Edward Hayes.....	Herring Cove...	11	127 50
100216	Katie M.....	Halifax.....	11	Charles Nelson.....	Halifax.....	3	30 50
107654	Lottie May.....	Lunenburg.....	40	George Schnair.....	Pennant.....	10	105 00
94665	Louis Luby.....	Halifax.....	41	Simon Lapierre et al.	W. Chezzetcook.	5	73 50
100580	Maggie E. C.....	Lunenburg.....	20	David Covey.....	Hagget's Cove..	7	65 50

1-2 EDWARD VII., A. 1902

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*HALIFAX COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
96805	Maggie May.....	Halifax .....	62	Jeremiah Fillis et al. . .	W. Chezzetcook.	9	120 50
85664	Mary E.....	Halifax.....	14	Andrew Twohig.....	Pennant.....	4	40 00
100227	May.....	".....	10	Edward Little.....	Terence Bay.....	3	29 50
103182	Meta.....	Shelburne.....	18	James Reno.....	Herring Cove.....	8	70 00
100524	Myrtle M. Gray.....	Halifax.....	19	James Gray.....	Pennant.....	7	64 50
85665	Nelle D.....	".....	12	James Crooks.....	Halifax.....	3	31 50
94667	Nettie M. G.....	".....	32	Mathew Lynch.....	Ferguson's Cove.	7	77 50
103539	Neva.....	".....	11	Ephraim Marryatt.....	Pennant.....	4	37 00
80841	Nina.....	".....	13	Ingraham Stevens.....	Owls Head.....	3	32 50
92571	Primrose.....	".....	14	Angus Gray.....	Pennant.....	6	53 00
94677	Progress.....	".....	14	David Richardson.....	L. W. Ship Harb.	2	27 00
100474	R. Beatrice.....	Lunenburg.....	19	James Morash.....	West Dover.....	7	64 50
75575	Rising Dawn.....	".....	18	Frederick Boutilier.....	Indian Harbour.	1	24 50
96806	Rising Sun.....	Halifax.....	28	Richard Christian.....	Prospect.....	6	67 00
69082	Saint Agnes.....	".....	38	E. & S. Homans.....	Clam Harbour.....	3	57 50
100218	Sarah M. W.....	".....	14	Hezekiah Wambolt.....	Indian Harbour.	5	46 50
100255	Seaflee.....	".....	12	James Stevens.....	Clam Harbour.....	4	38 00
75833	Twilight.....	".....	14	Ainsley Hubley.....	Boutilier's Cove.	7	59 50
77836	T. W. Smith.....	".....	35	Charles Beaver.....	Spry Bay.....	4	61 00
103869	Uganda.....	".....	14	Jas. B. Stoddard.....	Ship Harbour.....	4	40 00
96781	Venture.....	".....	43	Edward Dempsey.....	Herring Cove.....	11	114 50
100260	Violet.....	".....	12	James H. Smith.....	Sambro.....	3	31 50
61904	Water Lily.....	".....	14	Albert Lant.....	West Dover.....	4	40 00
92578	Willetta.....	".....	12	Joseph Gray.....	Sambro.....	4	38 00
100226	Willie H. Crosby.....	".....	65	James Julien et al.....	W. Chezzetcook.	16	169 00
85378	Zephyr.....	".....	16	Robert Slaunwhite.....	Terence Bay.....	6	55 00

## INVERNESS COUNTY.

71302	Alice.....	Charlottetown ..	10	Pepin Chaisson.....	Belle Cote.....	6	49 00
103322	Bonnie Brier Bush.	Port Hawkesb'ry	38	R. J. McDonald.....	Port Hastings ..	5	70 50
96778	Campania.....	".....	11	Robin Collas & Co....	Eastern Harbour	5	43 50
103313	Catherine.....	".....	10	Severin F. Chiasson...	Little River.....	4	36 00
103325	Elizabeth Ann.....	".....	11	David Bourgeois.....	Eastern Harbour	4	37 00
103542	Emma Brow.....	".....	17	Simon Bellefontaine...	".....	5	49 50
96774	Florence.....	".....	11	".....	".....	5	43 50
103317	Flying Star.....	".....	11	".....	".....	5	43 50
103312	Laura.....	".....	13	Medrick Aucoin.....	Belle Cote.....	6	52 00
103316	Laura.....	".....	10	Ubald Bourgeois.....	Back Settlement	5	42 50
103315	Lillie.....	".....	12	P. Fiset.....	Eastern Harbour	5	44 50
103318	Little Heir.....	".....	19	Michael Maillet.....	".....	6	58 00
96775	Louise.....	".....	11	Simon Bellefontaine...	".....	6	50 00
96779	Majestic.....	".....	12	Robin Collas & Co....	".....	5	44 50
96771	Marie.....	".....	10	John Roach.....	".....	4	36 00
96777	Marie Joseph.....	".....	11	Victor Roach.....	".....	5	43 50
103314	Mary.....	".....	10	Paul J. Aucoin.....	".....	4	36 00
96769	Mary Lambert.....	".....	11	Charles L. Chiasson...	Little River.....	6	50 00
69125	May Flower.....	".....	20	Hyacinthe Chiasson...	".....	7	65 50
103326	Mizpah.....	".....	10	George Le Brun.....	Eastern Harbour	5	42 50
96770	O. L. B.....	".....	12	David Chaisson.....	Grand Etang.....	5	44 50
96962	Sunrise.....	Yarmouth.....	18	Duncan J. Gillis.....	Seaside.....	3	37 50
103329	Saint Hélier.....	Port Hawkesb'ry	12	Robin Collas & C.....	Eastern Harbour	4	38 00
96773	Virgin.....	".....	10	Michael J. Ramard.....	Little River.....	5	42 50
96776	Willie B.....	".....	11	John F. Roach.....	Point Cross.....	4	37 00

## SESSIONAL PAPER No. 22

## LIST of Vessels which received Fishing Bounty, &amp;c.—Nova Scotia—Con.

## KING'S COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	N. of Crew paid.	Amount of Bounty paid.
							\$ cts.
83261	Economist.....	Digby .....	14	Jesse Parker.....	Hall's Harbor...	2	27 00
94756	*Sarah E. Ells....	St. John.....	19	Leonard Houghton...	" .....	3	40 00

## LUNENBURG COUNTY.

100839	Acalia.....	Lunenburg.....	34	Nathan Silver..	Lunenburg .....	6	73 00
107353	Abava.....	" .....	80	G. A. Smith.....	" .....	17	190 50
107644	Albertha .....	" .....	80	Amiel Corkum...	Middle La Have	17	190 50
94783	Alaska .....	" .....	80	Benj. Anderson..	Lunenburg .....	17	190 50
107657	Alcaea .....	" .....	80	Alexander Knickle...	" .....	17	190 50
100489	Algoma .....	" .....	56	Jeffrey Publicover	Getson's Cove...	15	153 50
107124	Alma Nelson....	" .....	80	J. Wm. Young....	Lunenburg .....	20	210 00
107955	Annie C. Hall....	" .....	74	Adam Selig.....	Vogler's Cove...	17	184 50
103799	Arbitrator.....	" .....	80	Christian Geldert..	Lunenburg .....	17	190 50
100472	Arcana .....	" .....	80	Alex. Knickle.....	" .....	17	190 50
103495	Athlon .....	" .....	80	Freeman Conrad...	Dayspring .....	17	190 50
100170	Atlanta .....	" .....	80	Freeman Anderson..	Lunenburg .....	17	190 50
103745	Avis .....	" .....	80	Albert V. Conrad..	Parks Creeks....	8	132 00
111412	Baden-Powell...	" .....	80	Jessen Anderson...	Lunenburg .....	20	210 00
103501	Barcelona.....	" .....	80	John M. Ritcey....	Ritcey's Cove...	17	190 50
103755	Basil M. Geldert...	" .....	80	Robert Geldert....	Lunenburg .....	18	197 00
107130	Beatrice L. Corkum	" .....	80	Wm. C. Smith.....	" .....	17	190 50
103430	Beluga .....	" .....	80	Albert V. Conrad..	Park's Creek....	8	132 00
103503	B. G. Anderson...	" .....	80	Thomas Hamm.....	Lunenburg .....	17	190 50
100838	Blanche A. Colp...	" .....	80	C. U. Mader .....	Mahone Bay .....	17	190 50
103421	Blenheim .....	" .....	80	Charles Smith.....	Lunenburg .....	17	190 50
94782	Bona Fides.....	" .....	80	J. J. Rudolph.....	" .....	16	184 00
96828	Bonanza .....	" .....	80	H. W. Adams.....	" .....	17	190 50
100848	Britannia.....	" .....	59	Lambert Lobnes...	Middle La Have	14	150 00
100571	Britannia.....	" .....	80	Charles Smith.....	Lunenburg .....	17	190 50
94645	C. A. Chisholm...	" .....	80	Abraham Ernst....	Mahone Bay .....	†	80 00
94658	C. A. Ernst.....	" .....	57	Abraham Ernst....	" .....	11	128 50
97084	Calla Lily .....	" .....	62	Albert V. Conrad..	Park's Creek....	15	159 50
103427	Cambrian .....	" .....	60	Dean Fralick.....	Pleasantville....	14	151 00
103502	Carlraine .....	" .....	80	Alvin Himmelman..	Lunenburg .....	18	197 00
97081	Carrie .....	" .....	80	James Romkey....	Lower La Have..	18	197 00
107115	Cayuga .....	" .....	80	Simon Hirtle.....	Middle La Have	20	210 00
100579	Citizen .....	" .....	80	Murdock McGregor..	Ritcey's Cove...	17	190 50
90869	Clara E. Mason...	" .....	80	Richard Smith.....	Lunenburg .....	15	177 50
103415	Clarence Smith...	" .....	80	Wm. C. Smith.....	" .....	17	190 50
107122	Collector .....	" .....	80	W. N. Reinhardt...	La Have.....	19	203 50
103759	Columbia.....	" .....	80	J. A. Silver.....	Lunenburg .....	17	190 50
107966	Companion.....	" .....	80	Jeffrey Publicover	Getson's Cove...	21	216 50
100834	Comrade .....	" .....	80	W. N. Reinhardt...	La Have.....	17	190 50
100159	C. U. Mader.....	" .....	80	C. U. Mader .....	Mahone Bay .....	17	190 50
107112	Daisy Linden .....	" .....	80	Abraham Ernst....	" .....	17	190 50
88355	D. A. Mader .....	" .....	80	C. U. Mader .....	" .....	13	164 50
111405	Deeta M.....	" .....	80	John McLean.....	" .....	14	171 00
90855	Delta .....	Shelburne...	25	E. F. Zwicker.....	Lunenburg .....	8	77 00
90834	Diego .....	Port Medway...	27	Harris Conrad.....	Vogler's Cove...	5	59 50
97089	Dictator .....	Lunenburg...	80	S. Watson Oxner...	Lunenburg .....	17	190 50
107649	D. M. Owen.....	" .....	72	J. Norman Rafuse...	Conquerall Bank	17	182 50
107962	Edward Roy.....	" .....	75	Wm. C. Smith.....	Lunenburg .....	15	172 50
83308	Ella .....	" .....	10	Jennis C. Hanson...	Oakland.....	1	16 50
107127	Ellen L. Maxner...	" .....	80	H. W. Adams.....	Lunenburg .....	17	190 50
103424	Elva M.....	" .....	80	C. U. Mader .....	Mahone Bay....	18	197 00
103492	Emily L.....	" .....	10	Wesley Stevens...	Tancook.....	2	23 00
107123	Emulator .....	" .....	80	John M. Ritcey....	Ritcey's Cove...	17	190 50
88356	Energy .....	" .....	80	C. U. Mader .....	Mahone Bay....	17	190 50

\* For 1899.

† Crew not entitled to bounty.



List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
94659	Enterprise.....	Lunenburg..	80	Andrew Ross .....	Middle La Have	18	197 00
100151	Erminie.....	"	80	Thomas Hamm .....	Lunenburg .....	17	190 50
103429	Fern.....	"	70	Edmund Walters .....	Middle La Have	17	180 50
103743	Flo F. Mader .....	"	80	C. U. Mader.....	Mahone Bay.....	20	210 00
111406	Flora W. Sperry..	"	80	John D. Sperry.....	Petite Rivière....	17	190 50
111401	Frances Willard..	"	80	Wm. C. Smith.....	Lunenburg .....	16	184 00
97083	Garland.....	"	51	John D. Sperry.....	Petite Rivière....	10	116 00
90582	G. A. Smith.....	"	80	G. N. C. Hawkins .....	Lunenburg.....	17	190 50
103753	Gladys B. Smith..	"	80	Benj. C. Smith.....	" .....	19	203 50
96836	Gleaner.....	"	80	Wm. C. Acker .....	" .....	15	177 50
103752	Glyndon.....	"	80	Titus Wentzel .....	Ritcey's Cove....	17	190 50
100850	Grace.....	"	80	Daniel Getson.....	Getson's Point...	17	190 50
90862	Grenada.....	"	80	S. Watson Oxner .....	Lunenburg.....	15	177 50
107958	Guardian.....	"	80	Reuben Ritcey.....	Ritcey's Cove....	17	190 50
100488	Gurnet.....	"	56	Alvin Creaser.....	" .....	10	121 00
107119	Harold J. Parks..	"	80	L. B. Currie.....	West Dublin .....	17	190 50
107951	Harry Lewis.....	"	80	Wm. C. Smith.....	Lunenburg .....	21	216 50
103744	Harry Smith.....	"	80	Henry Wilson.....	" .....	17	190 50
107641	Hattie L. M.....	"	80	P. B. Zwicker.....	Mahone Bay .....	17	190 50
107965	Hazel B. Mosher..	"	72	Thomas Hamm.....	Lunenburg .....	17	182 50
107659	Hilda C.....	"	80	S. Watson Oxner .....	" .....	19	203 50
107128	Huron.....	"	80	Henry Wilson.....	" .....	16	184 00
107956	Iona.....	"	80	Murdoch McGregor..	Ritcey's Cove....	17	190 50
100490	Irene M. B.....	"	66	Eli Ernst.....	Mahone Bay .....	13	150 50
107116	Ivy.....	"	12	Joshua Ernst.....	Conquerall.....	3	31 50
96830	J. A. Silver.....	"	80	Charles L. Silver .....	Lunenburg .....	17	190 50
103414	Jeanie Myrtle....	"	80	John M. Ritcey.....	Ritcey's Cove....	17	190 50
103491	Jennie May.....	"	80	Martin B. Westhaver..	Lunenburg .....	16	184 00
107646	Jessie L. Smith..	"	80	James Romkey.....	Lower LaHave....	20	210 00
100164	J. H. Ernst.....	"	80	S. Watson Oxner.....	Lunenburg .....	17	190 50
100837	J. M. Young.....	"	80	J. Wm. Young.....	" .....	17	190 50
107960	J. W. Mills.....	"	76	Jacob Hilts.....	Indian Point.....	17	186 50
107969	Kandahar.....	"	80	Wm. C. Smith.....	Lunenburg .....	17	190 50
107970	Karmoe.....	"	80	Ammon Ritcey.....	Ritcey's Cove....	17	190 50
111404	Kimberley.....	"	80	C. U. Mader.....	Mahone Bay.....	17	190 50
107114	Klondyke.....	"	80	James Richard.....	Getson's Cove....	18	197 00
111410	Kuvera.....	"	80	James Young.....	Lunenburg .....	19	203 50
96838	La France.....	"	80	S. Watson Oxner.....	" .....	17	190 50
94788	Laura C. Zwicker..	"	80	Joshua E. Backman..	" .....	17	190 50
94780	Lawrence.....	"	80	Abraham Ernst.....	Mahone Bay.....	20	210 00
103202	L. B. Currie.....	"	80	L. B. Currie.....	West Dublin .....	17	190 50
107126	Lena F. Oxner.....	"	80	James W. Geldert .....	Lunenburg .....	17	190 50
96827	Leopold.....	"	80	Howard Wynacht.....	" .....	17	190 50
96833	L. E. Young.....	"	80	Benjamin Anderson ..	" .....	17	190 50
107660	Lila D. Young.....	"	80	John B. Young.....	" .....	20	210 00
107129	Lilla B. Hirtle....	"	80	Benj. Anderson.....	" .....	21	216 50
103760	Lillian.....	"	80	Elias Richard, Sr.....	Getson's Point...	19	203 50
107113	L. Morton.....	"	60	Adam Selig.....	Vogler's Cove....	13	144 50
100830	Lorraine C.....	"	64	Henry Wilson.....	Lunenburg .....	16	168 00
83316	Lottie.....	Port Medway..	80	Samuel E. Teel.....	Vogler's Cove....	19	203 50
103420	Luetta.....	Lunenburg.....	80	Isaac Mason.....	Lunenburg .....	18	197 00
103509	Maggie E. Z.....	"	70	Emanuel Zellars.....	" .....	17	180 50
97100	Maggie M. W.....	"	80	Howard Wynacht.....	" .....	17	190 50
100162	Magic.....	"	45	John D. Sperry.....	Petite Rivière....	10	110 00
107120	Madeira.....	"	80	Theophilus Creasor..	Ritcey's Cove....	20	210 00
103425	Majestic.....	"	80	Reuben Ritcey.....	" .....	17	190 50
107652	Mascot.....	"	80	Charles Hewett.....	Lunenburg .....	19	203 50
107967	May Myree.....	"	80	Elias Richard, Sr.....	Getson's Point...	19	263 50
100849	Merl M. Parks.....	"	80	James Wamback.....	Park's Creek.....	17	190 50
107650	Mildred.....	"	80	Abraham Ernst.....	Mahone .....	18	197 00
100153	Milo.....	"	83	J. Wm. Young.....	Lunenburg .....	18	197 00
107111	Millie Mace.....	"	80	Wm. C. Smith.....	" .....	18	197 00
11408	Mindoro.....	"	80	Isaac Zink.....	Ritcey's Cove....	17	190 50



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List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
103412	Minnie B. ....	Lunenburg .....	25	Phineas Richard .....	W. LaHave Ferry .....	7	70 50
107952	Minnie M. Cook....	" .....	80	Wm. C. Smith. ....	Lunenburg .....	21	216 50
107121	Minto.....	" .....	80	Daniel Zink.....	" .....	18	197 00
103757	Minnie J. Heckman	" .....	80	Anthony Heckman....	Ritcey's Cove.....	18	197 00
103422	Mischief .....	" .....	80	Thomas A. Wilson .....	Bridgewater.....	17	190 50
92632	Monarch .....	" .....	80	Allan R. Morash.....	Lunenburg .....	15	177 56
107961	Monitor .....	" .....	80	J. Jos. Rudolph .....	" .....	18	197 00
103758	Muriel .....	" .....	80	E. F. Zwicker.....	" .....	19	203 50
107968	New Era.....	" .....	80	Howard Wynacht.....	" .....	19	203 50
100485	Nightingale.....	" .....	52	John Haughn.....	Pentz Settlement .....	9	110 50
92636	Nonpareil .....	" .....	80	E. F. Zwicker.....	Lunenburg .....	17	190 50
88342	Nova Zembla.....	" .....	79	C. U. Mader.....	Mahone Bay.....	13	163 50
94786	Ontario.....	" .....	80	Thomas Hamm.....	Lunenburg .....	17	190 50
94779	O. P. Silver.....	" .....	80	Charles L. Silver.....	" .....	17	190 50
100245	Oracle .....	Halifax .....	18	Daniel Wolfe.....	West Dublin.....	2	31 00
100836	Panama .....	Lunenburg .....	80	Henry Adams .....	Lunenburg .....	17	190 50
107642	Pavia .....	" .....	80	James Wamback.....	Park's Creek.....	17	190 50
103747	Perfect .....	" .....	54	John Schmeisser .....	Middle La Have .....	14	145 00
107655	Premier.....	" .....	80	James Wamback.....	Park's Creek.....	17	190 50
111402	Protector .....	" .....	80	Thomas A. Wilson .....	Bridgewater.....	17	190 50
100483	Puma .....	" .....	58	Simon Pentz.....	Pentz Settlement .....	16	162 00
94774	Puritan.....	" .....	80	Theophilus Creasor....	Ritcey's Cove.....	18	197 00
107959	Reliance .....	" .....	80	Artemas Zink.....	" .....	18	197 00
107633	Renown .....	" .....	80	Wm. C. Smith.....	Lunenburg .....	17	190 50
96834	Robert F. Mason ..	" .....	80	Martin Mason.....	" .....	18	197 00
107647	Roc .....	" .....	80	C. U. Mader.....	Mahone Bay.....	15	177 50
107125	Roma.....	" .....	80	E. F. Zwicker.....	Lunenburg .....	17	190 50
100572	Rowena.....	" .....	51	Wm. Schmeisser .....	Middle La Have .....	14	142 00
100471	Secret .....	" .....	80	John B. Young.....	Lunenburg .....	17	190 50
88349	Senovar.....	" .....	80	Nathan Hiltz.....	Martin's River.....	10	145 00
107963	Shamrock .....	" .....	80	Alexander Knickle.....	Lunenburg .....	17	190 50
111413	Sigdrifa.....	" .....	13	Wm. Westhaver.....	" .....	3	32 50
100165	Snow Queen .....	" .....	67	C. U. Mader.....	Mahone Bay.....	15	164 50
107167	St. Clair.....	" .....	80	Charles Smith.....	Lunenburg .....	14	171 00
103500	St. Helena.....	" .....	80	Howard Wynacht.....	" .....	17	190 50
107648	St. Vincent.....	" .....	78	Edmund Walters .....	Middle La Have .....	18	195 00
111407	Strathcona .....	" .....	80	Freeman Anderson....	Lunenburg .....	17	190 50
103754	Talmouth.....	" .....	80	John D. Sperry.....	Petite Rivière.....	17	190 50
107651	Torato .....	" .....	80	J. Wm. Young.....	Lunenburg .....	17	190 50
103199	Trilby .....	" .....	12	Nathan Levy.....	" .....	4	38 00
100575	Tyler .....	" .....	54	W. A. Zwicker.....	" .....	12	132 00
107957	Ungava .....	" .....	80	Wm. Cleversey.....	Pleasantville.....	21	216 50
103742	Unique .....	" .....	80	Abraham Ernst.....	Mahone Bay.....	17	190 50
97098	Urania .....	" .....	80	Daniel Heisler.....	Lunenburg .....	18	197 00
103417	Uruguay .....	" .....	80	Daniel Lohnes.....	Ritcey's Cove.....	17	190 50
83164	Valiant.....	" .....	80	Thomas A. Cook.....	Lunenburg .....	15	177 50
107964	Vernie May.....	" .....	76	Abraham Ernst.....	Mahone Bay.....	17	186 50
111409	Victoria.....	" .....	80	W. N. Reinhardt.....	La Have.....	19	203 50
103504	Viking .....	" .....	80	Amiel Corkum.....	Middle La Have.....	18	197 00
100152	Werra .....	" .....	80	E. F. Zwicker.....	Lunenburg .....	17	190 50
111403	Willis C.....	" .....	80	Amiel Corkum.....	Middle La Have.....	18	197 00
96829	Wisteria.....	" .....	80	Freeman Anderson....	Lunenburg .....	17	190 50
107645	Yosemite.....	" .....	80	Kenneth Silver.....	Dayspring.....	19	203 50

## QUEEN'S COUNTY.

100607	Iceland.....	Shelburne .....	19	John E. McDonald .....	Port Jolly.....	5	51 50
83134	Infant.....	Lunenburg .....	15	Wm. Wagner.....	Summerville.....	4	41 00
103174	Iona.....	Liverpool.....	15	Robert Smith.....	Hunt's Point.....	5	47 50
103191	Jennie B.....	" .....	13	Lawson Vogler.....	Port Jolly.....	4	39 00

1-2 EDWARD VII., A. 1902

List of Vessels which received Fishing Bounty. &c.—Nova Scotia—*Con.*QUEEN'S COUNTY—*Concluded*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
54132	John Franklin.....	Halifax.....	18	Andrew McNutt.....	Liverpool.....	3	37 50
94833	News Boy.....	Liverpool.....	16	Alexander Shankle...	Port Mouton....	4	42 00
61916	Only Son.....	".....	16	Wm. A. Conrad.....	Liverpool.....	4	42 00
103194	Oressa.....	Liverpool.....	10	Joseph Hagan.....	Hunt's Point....	4	36 00
100608	Vesper.....	Shelburne.....	14	Oren Huskins.....	Summerville....	5	46 50

## RICHMOND COUNTY.

36474	Alexander Fraser.....	Lunenburg.....	32	Samuel Sampson.....	River Bourgeois.	10	97 00
84856	Alice May.....	Arichat.....	39	Wm. I. LeVesconte....	".....	10	104 00
77544	Alpha.....	".....	42	".....	".....	6	81 00
111472	Annie May.....	".....	17	James Monbourquette.	Rock Dale.....	3	36 50
103463	Annie May.....	".....	11	Placide Dugas.....	River Bourgeois.	5	43 50
94680	Bonnie Glen.....	Halifax.....	17	Xavier Marchand.....	Petit de Grat....	6	56 00
75561	Boreas.....	Lunenburg.....	41	John Colford.....	Port Richmond..	9	99 50
54156	British Lady.....	Halifax.....	19	Albert Joyce.....	Riv. Inhabitants	1	25 50
74100	Candid.....	Arichat.....	23	Desiré Burke.....	River Bourgeois.	7	68 50
72061	C. P. M.....	".....	22	Alexander Burke.....	".....	6	61 00
88462	Fannie S.....	".....	28	Andrew Fougère.....	".....	9	86 50
88599	Guide.....	Halifax.....	38	Edward Poirier.....	Goulet.....	11	109 50
88513	Ida.....	Sydney.....	11	Isiah LeBlanc.....	Little Bras d'Or.	5	43 50
96764	Ida C. Stafford.....	Hawkesbury.....	54	Robert Murray.....	Port Richmond..	9	112 50
103470	Ida M. Burke.....	Arichat.....	16	Samuel P. Burke.....	St. Peters.....	4	42 00
85560	Jacques.....	Yarmouth.....	58	Frederick Poirier.....	D'Escousse.....	15	155 50
85689	James Beckwith.....	Halifax.....	31	D. T. Leslie.....	Spry Bay.....	5	63 50
46294	Janett.....	".....	32	John B. Girroir.....	West Arichat....	6	71 00
43135	J. B. M.....	".....	20	John Landry.....	Petit de Grat....	5	52 50
88454	Jubilee.....	Arichat.....	34	Arthur Poirier.....	D'Escousse.....	10	99 00
103458	K. McKenzie.....	".....	17	James Barrow.....	L'Ardoise West..	6	56 00
88467	Katie.....	".....	11	Henry LeLacheur.....	Martinique.....	2	24 00
103469	Katie B.....	".....	16	John Burke.....	River Bourgeois.	6	55 00
38516	Lady of the Lake.....	".....	26	Peter Landry.....	St. Peters.....	5	58 50
61615	Laura Cox.....	Guysboro.....	49	Alex. E. Morrison.....	D'Escousse.....	14	140 00
88455	Laura Victoria.....	Arichat.....	39	Henry McDonald.....	".....	12	117 00
96763	Lelia Linwood.....	".....	67	Wm. I. LeVesconte....	River Bourgeois.	15	164 50
103467	Lizzie May.....	".....	12	Abram Fougère, jr....	".....	4	38 00
72071	Lumen Diei.....	".....	20	Urbain Sampson.....	".....	6	59 00
103532	Maria A.....	Halifax.....	22	John Walker.....	Basin Riv. Inh..	2	35 00
38522	Mary.....	Arichat.....	23	Isaiah Boudrot.....	River Bourgeois.	7	68 50
85388	Mary Alice.....	Halifax.....	21	Edward Malcom.....	Port Malcom.....	5	53 50
100380	Mary D.....	Sydney.....	27	Simon Deveaux.....	Little Bras d'Or.	6	66 00
103462	Maud.....	Arichat.....	16	Henry Duon.....	Arichat.....	3	35 50
72043	Neptune.....	".....	26	Henry Sampson.....	River Bourgeois.	7	71 50
74365	Nova Stella.....	".....	53	Léon Poirier.....	D'Escousse.....	16	157 00
54139	Ocean Belle.....	Halifax.....	20	Isidore Fougère.....	Poulamond.....	7	65 50
61630	Olive J.....	".....	57	John J. Malcom.....	Port Malcom.....	9	115 50
72067	Philomene D.....	Arichat.....	22	John Pelham.....	Janvrin Island..	5	54 50
100477	Pilot.....	Lunenburg.....	42	Wm. Proctor.....	Riv. Inhabitants	7	87 50
69193	Star.....	Halifax.....	33	David Goyette.....	Cape Auguet....	8	85 00
103461	St. Lidwina.....	Arichat.....	11	Alexander Peters.....	L'Ardoise.....	4	37 00
103464	St. Patrick.....	".....	27	Thomas Clannon.....	Lower L'Ardoise	10	92 00
92599	Thistle.....	Sydney.....	11	R. Monbourquette....	L'Ardoise West..	4	37 00
103460	Two Brothers.....	Arichat.....	18	Maurice Peters.....	Lower L'Ardoise	6	57 00
71034	Vanguard.....	".....	51	Thomas Boudrot.....	Petit de Grat....	6	90 00
38523	Victoria.....	".....	24	Henry Burke.....	St. Peters.....	6	63 00
57662	Village Bride.....	Halifax.....	24	John D. Malcom.....	Port Malcom....	5	56 50

## SESSIONAL PAPER No. 22

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

## SHELburne COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
94632	A. C. Greenwood...	Shelburne	15	Howard Chetwynd...	Port Saxon...	6	54 00
97034	A. D'E...	Yarmouth	15	James Stoddart...	Bear Point	7	60 50
103793	Agatha...	Shelburne	80	John H. Thorbourne...	Lr. Jordan Bay	22	223 00
103792	Alice M. Gordon...	"	80	Enos Churchill...	Lockport	21	216 50
100620	Alina...	Shelburne	80	Churchill Locke...	Lockport	20	210 00
100617	Altona	"	28	Austin Swansburg...	Little Harbor...	9	86 50
90655	Annina	Yarmouth	12	George Pike...	Coffins Croft...	7	57 50
107984	Aroma	Shelburne	80	John A. McGowan...	Shelburne	17	190 50
100813	Blanche...	Barrington	24	John F. Duncan...	Clark's Harbour...	12	102 00
107053	Bonnie Lin	"	10	Norman Madden...	Baccaro	5	42 50
103186	Brittania	Shelburne	11	Ross Enslow...	W. Green Harb'r	5	43 50
96970	Charlie Richardson.	"	26	John B. Harding, sr.	Rockland	8	78 00
100605	Dawn...	Barrington	49	A. N. Smith...	Barrington...	16	153 00
103063	Defender	Yarmouth	20	Davis Jeffrey...	U. Woods Harb'r	5	52 50
103118	Della F. Tarr	St. Andrews	34	E. P. Greenwood...	N. E. Harbour...	9	92 50
83492	Dessie	Liverpool	11	Eugene Locke	Lockeport	4	37 00
103053	Eddie C.	Yarmouth	11	R. H. Nickerson...	U. Woods Harb'r	3	30 50
103060	Edith M.	"	20	George Hagar	N. W. Harbour...	7	65 50
96976	Edith	Shelburne	40	Enos Churchill...	Lockeport	9	98 50
103789	Effie B. Nickerson...	"	22	T. L. Nickerson...	L. Woods Harb'r	6	61 00
77603	Eldon C.	Barrington	27	Knowles Thomas...	Cape Negro...	9	85 50
103795	Etta Vaughan	Shelburne	80	B. P. Thorbourn	Sandy Point...	22	223 00
107054	Favourite	Barrington	28	Samual S. Atwood...	Barrington...	10	93 00
85476	Floyding	Shelburne	15	Edward A. Capstick...	Lockeport	5	47 50
83255	Floyd...	Annapolis	20	Alfred E. Shepard...	Barrington Head	8	72 00
90645	Fly	Yarmouth	16	Wm. Wickens...	Shag Harbour...	4	42 00
100818	Geneva Ethel	Barrington	29	Hugh McAlpine	Lockeport	8	81 00
90647	Hattie Emeline	Yarmouth	11	Charles A. Reynolds...	U. Port La Tour.	6	50 00
103790	Helene	Shelburne	80	Churchill Locke...	Lockeport	20	210 00
58566	J. Lyons	Barrington	17	W. H. Nickerson...	Cape Negro...	8	69 00
94941	John Purney	Shelburne	80	George H. King	Sandy Point	20	210 00
73967	Katie...	Liverpool	14	Churchill Locke	Lockeport	5	46 50
107981	Kestrel	Shelburne	80	George A. Cox...	Shelburne	21	216 50
90438	Lark	Barrington	13	John Ross...	U. Port La Tour.	5	45 50
94661	L. C. Tough	Shelburne	12	Thomas Swain	Black Point	5	44 50
107982	Lottie A. Burns...	"	80	Wm. McMillan...	Lockeport	22	223 00
51972	Lydia Ryder...	"	57	E. P. Greenwood...	N. E. Harbour...	9	115 50
103796	Mabel Denvers...	"	14	Alexander Smith...	Cape Negro...	5	46 50
103712	Marguerite	Yarmouth	10	Alexander Abbott...	Forbes' Point...	4	36 00
83493	Mary C.	Liverpool	80	John M. Harding...	Osborne...	9	138 50
83434	Mary May	Shelburne	20	Adam J. Firth...	Shelburne	7	65 50
103177	Mayflower	"	12	Avard Hamilton	Carleton Village	4	38 00
100606	Myra Louise...	Barrington	17	Arthur H. Perry...	Port Saxon...	6	56 00
103175	Myrtle	Shelburne	10	Wm. E. Wolfe	Port Le Herbert	4	36 00
103800	Nellie I. King...	"	80	George H. King	Sandy Point	23	229 50
90439	Oscar F.	Barrington	18	Clarence H. McKay...	Roseway	6	57 00
100820	Ranger	"	11	Freeman Atwood...	Atwood Brook	2	24 00
103706	Regine...	Yarmouth	10	Luther McComiskey...	Centerville	4	36 00
103783	Roving Bird	Halifax	24	King Perry	N. E. Harbour	7	69 50
90433	Springwood	Shelburne	80	Wm. McMillan	Lockeport	22	223 00
90648	Ste. Anne...	Barrington	11	H. A. Nickerson...	Forbes' Point...	6	50 00
96961	Stranger	"	20	Robert Atkinson...	North East Point	5	52 50
77744	Tivoli	Shelburne	24	Wm. J. Doane...	Red Head...	6	63 00
90430	Whip-poor-Will...	"	17	J. P. Littlewood...	Ingomar	6	56 00
103183	Will Carlton	Barrington	80	James Snow...	U. Port La Tour.	17	190 50
75722	Wren	Shelburne	22	Wm. McCarthy...	Shelburne	7	67 50
	Yuba...	Yarmouth	15	Josiah S. Nickerson...	U. Port La Tour.	6	54 00



LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

## VICTORIA COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
97046	Fredona.....	Liverpool.....	12	Dan Buchanan.....	Eel Cove.....	3	31 50
107351	Wilfred Laurier....	Sydney.....	10	Dan McLeod.....	South Ingonish.	4	36 00

## YARMOUTH COUNTY.

80647	Annie M. Bell.....	Yarmouth.....	64	David D'Entremont...	West Pubnico...	18	181 00
94980	Aurora.....	".....	80	Leon D'Eon.....	".....	18	197 00
88267	Bessie May.....	St. John.....	23	Roland Sholds.....	Charlesville.....	1	29 50
85536	Circassian.....	Yarmouth.....	80	A. F. Stoneman & Co.	Yarmouth.....	23	229 50
94977	Civilian.....	".....	80	Henry S LeBlanc.....	West Pubnico...	20	210 00
103066	Eddie J.....	".....	23	Luxime D'Entremont..	".....	10	88 00
85683	Edith L.....	Digby.....	16	James Adams.....	Port Maitland..	6	55 00
97036	Eva.....	Yarmouth.....	10	Abijah Rankin.....	Lower Argyle...	3	29 50
90654	Flora.....	".....	64	David D'Entremont...	West Pubnico...	20	194 00
94972	Florence.....	".....	11	Marc Boudreau.....	Tusket Wedge...	7	56 50
90885	Georgina.....	".....	80	Henry Lewis.....	Yarmouth.....	22	223 00
100327	Hattie.....	".....	11	Robert Ellenwood....	".....	3	30 50
80643	Hazel Dell.....	".....	80	James Amiro.....	West Pubnico...	20	210 00
85554	Hazel Glen.....	".....	80	H. T. D'Entremont...	L. E. Pubnico...	21	216 50
103717	Henry L.....	".....	10	A. C. D'Entremont...	West Pubnico...	3	29 50
103709	Lizzie E.....	".....	14	Ernest J. Ellis.....	Port Maitland..	6	53 00
80614	Louise.....	".....	80	J. H. Porter & Co....	Tusket Wedge...	20	210 00
103718	Lucy.....	".....	10	A. F. D'Entremont...	West Pubnico...	2	23 00
80632	Lumen.....	".....	30	J. H. Porter & Co....	Tusket Wedge...	6	69 00
88596	M. A. Louis.....	".....	64	A. F. Stoneman & Co.	Yarmouth.....	18	181 00
107337	Marguerite.....	".....	57	L. P. D'Entremont...	West Pubnico...	17	167 50
103057	Mayflower.....	".....	12	Nathaniel Pierce.....	Charlesville.....	3	31 50
111523	Mildred P.....	Digby.....	11	James Haskell.....	Port Maitland..	2	24 00
90659	N. A. Laura.....	Yarmouth.....	59	Julien D'Entremont...	West Pubnico...	16	163 00
90892	Nellie.....	".....	59	J. H. Porter & Co....	Tusket Wedge...	15	156 50
111521	Retta E.....	Digby.....	10	Calvin Sollows.....	Port Maitland..	3	29 50
88589	Sanford.....	Yarmouth.....	20	Samuel N. Perry.....	".....	6	59 00
83254	Seafoam.....	Annapolis.....	28	Joseph L. Amiro.....	L. E. Pubnico...	11	99 50
75724	Sea Foam.....	Yarmouth.....	75	J. H. Porter & Co....	Tusket Wedge...	17	185 50
100323	Senora.....	".....	80	Marc A. Surette.....	West Pubnico...	22	223 00
100313	Souvenir.....	".....	71	Louis D'Eon.....	".....	16	175 00
88597	Uncle Sam.....	".....	80	G. D'Entremont.....	East Pubnico...	21	216 50
100330	Viola Pearl.....	".....	23	Harvey Goodwin.....	Pubnico.....	9	81 50
90896	Wapite.....	".....	80	A. F. Stoneman & Co.	Yarmouth.....	22	223 00
85559	Willie F.....	".....	12	Riley Haskell.....	Port Maitland..	6	51 00
90882	Will O'the Wisp....	".....	51	A. F. Stoneman & Co.	Yarmouth.....	19	174 50
90897	Wrasse.....	".....	56	".....	".....	18	173 00

## PROVINCE OF NEW BRUNSWICK.

## CHARLOTTE COOUNTY.

103124	Addie B.....	St. Andrews....	13	Arthur Ramsdell.....	Whitehead Isl'd.	1	19 50
107439	Armita.....	".....	15	Hemon E. Guptill....	Grand Harbour.	1	21 50
107913	Arnold B.....	".....	10	Henry H. Cheney.....	".....	2	23 00
107603	Augusta Evelyn....	Weymouth.....	29	James Scovil.....	Flagg's Cove....	7	74 50
108127	Avis C. Tobey.....	St. Andrews....	13	Jesse Guptill.....	Whitehead Isl'd.	4	39 00
64011	Bee.....	".....	18	Sherman Lawson.....	Flagg's Cove....	3	37 50
107911	Bertie.....	".....	13	Judson L. Guptill, jr.	Grand Harbour.	3	32 50
103114	Edward Morse.....	".....	32	Alexander Calder.....	Campo Bello....	10	97 00



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LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*CHARLOTTE COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
59391	Eliza Ann .....	St. Andrews .....	12	John Wills .....	Whitehead .....	1	18 50
92516	Emma .....	" .....	22	Walter Calder, sr. ....	Welshpool .....	4	48 00
83202	Enchantress .....	" .....	10	Peter Dixon, sr. ....	Flagg's Cove .....	3	29 50
80803	Exenia .....	Windsor .....	18	Wm. F. Parker .....	Beaver Harbour .....	4	44 00
88276	Falcon .....	St. Andrews .....	12	John F. Cronk .....	Flagg's Cove .....	4	38 00
92511	Fleet Wing .....	" .....	11	Aldin McFarland .....	" .....	3	30 50
107915	Freddie L. ....	" .....	15	Charles E. Leighton .....	Grand Harbour .....	1	21 50
97146	Free Trade .....	" .....	10	L. C. Watt .....	Flagg's Cove .....	1	16 50
107432	Golden Rule .....	" .....	49	Mariner Calder, et al. ....	Wilson's Beach .....	14	140 00
107910	Grace and Ethel .....	" .....	16	Robert Ingersoll .....	Woodward's Cove .....	5	48 50
107437	Hattie L. ....	" .....	12	F. A. Cheney .....	Grand Harbour .....	3	31 50
83463	Havelock .....	" .....	33	Wm. James .....	Wilson's Beach .....	5	65 50
103119	Hortense .....	" .....	15	Wm. J. Morse .....	White Head Is. ....	4	41 00
103997	Jessie James .....	" .....	11	Lewis Frankland .....	White Head .....	2	24 00
77766	Laconia .....	Shelburne .....	15	John Dixon, sr. ....	Flaggs Cove .....	3	34 50
88273	Lillian E. ....	St. Andrews .....	13	S. L. Dakin .....	Beaver Harbour .....	2	26 00
59342	Lizzie S. McGee .....	" .....	14	Andrew McGee .....	Back Bay .....	3	33 50
77965	Lydia B. ....	" .....	18	John M. Calder .....	Welshpool .....	2	31 00
92514	Maggie Jane .....	" .....	10	John Thomas .....	Flaggs Cove .....	3	29 50
107438	Minnie H. ....	" .....	11	Chester Frankland .....	White Head Is. ....	4	37 00
92518	Pearl .....	" .....	18	Martin Eldridge .....	Beaver Harbour .....	3	37 50
107904	Quoddy Queen .....	" .....	13	Harrington Guptill .....	White Head Is. ....	3	32 50
75591	Rise and Go .....	" .....	16	William Sirls .....	Wilson's Beach .....	7	61 50
107909	S. B. ....	" .....	12	Shadrach Bancroft .....	White Head Is. ....	3	31 50
88287	Satellite .....	" .....	26	Simon Brown .....	Wilson's Beach .....	5	58 50
107433	Sir John .....	" .....	11	Hiram Morse .....	White Head .....	3	30 50
59387	Telephone .....	" .....	19	James Brown, jr., 3rd. ....	Wilson's Beach .....	4	45 00
107440	Three Links .....	" .....	12	Robert A. Main .....	Woodwards Cove .....	3	31 50
88282	Veritas .....	" .....	10	Simon Leonard .....	Leonardville .....	1	16 50
103125	Virgin Queen .....	" .....	16	Nelson Morse .....	White Head Is. ....	4	42 00
77969	Wave Queen .....	" .....	11	Hiram W. Foster .....	Grand Harbour .....	4	37 00
107917	Zelma .....	" .....	17	Henry Frankland .....	White Head Is. ....	4	43 00

## GLOUCESTER COUNTY.

103009	Adeline Gladys .....	Chathan .....	12	J. N. LeBouthillier .....	Caraget .....	4	38 00
72099	Adelina .....	" .....	12	Clement Lanteigne .....	Lameque .....	4	38 00
103081	Albatross .....	" .....	13	Thomas Ahier .....	Shippegan .....	3	32 50
100984	Alice .....	" .....	11	Joseph J. Doiron .....	Caraget .....	4	37 00
103279	Alice Maud .....	" .....	10	Robin, Collas & Co. ....	" .....	4	36 00
97194	Alika .....	" .....	12	Lange Paulin .....	Lameque .....	5	44 50
103763	Alouette .....	" .....	10	Thomas Ahier .....	Shippegan .....	4	36 00
103071	Anglesea .....	" .....	12	Hy. LeBouthillier .....	Caraget .....	4	38 00
103073	Anna .....	" .....	11	W. S. Loggie & Co. ....	Chatham .....	5	43 50
92419	Anna .....	" .....	12	Docit�� Chiasson .....	Lameque .....	4	38 00
100960	Annie M. ....	" .....	11	W. S. Loggie & Co. ....	Chatham .....	3	30 50
100987	Arabi .....	" .....	12	Philip Rive .....	Caraget .....	3	31 50
96739	Argeline .....	" .....	14	Octave Paulin .....	" .....	4	40 00
103085	Argentina .....	" .....	12	Robin, Collas & Co. ....	" .....	3	31 50
100983	Bee .....	" .....	11	" .....	" .....	2	24 00
61431	Bee .....	" .....	11	Paul Noel .....	Lameque .....	3	30 50
72079	Betsy .....	" .....	13	Wm. Fruing & Co. ....	Shippegan .....	4	39 00
100975	Big Bear .....	" .....	10	Robert Young .....	Caraget .....	3	29 50
100299	Blanchard .....	" .....	12	Robin, Collas & Co. ....	" .....	4	38 00
103589	Blenheim .....	" .....	13	" .....	" .....	4	39 00
100909	Bluenose .....	" .....	11	Joseph Sewell .....	" .....	3	30 50
103780	Britannia .....	" .....	13	Wm. Fruing & Co. ....	" .....	3	32 50
100780	Britannic .....	" .....	12	Colson Hubbard .....	" .....	3	31 50
100988	Caesar .....	" .....	10	Philip Rive .....	" .....	3	29 50
100774	Calliope .....	" .....	12	" .....	" .....	3	31 50

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty paid.
							\$ cts.
103271	Celia	Chatham	11	Dominique Gallien	Caraquet	4	37 00
103585	Cerdric	"	14	Philip Rive	"	3	33 50
100784	Charlotte	"	13	Robert Young	"	4	39 00
100789	Chazalie	"	11	"	"	4	37 00
96730	Christina	"	11	Robin, Collas & Co.	"	3	30 50
101000	Condor	"	10	Thomas Ahier	Shippegan	5	42 50
103083	Corsair	"	10	"	"	3	29 50
100916	Cygnat	"	12	Robin, Collas & Co.	Caraquet	5	44 50
100971	Cyprian	"	10	Elie Sivret	"	4	36 00
100913	Daffodil	"	10	Thomas Ahier	Shippegan	3	29 50
100915	Dawn	"	12	Robin, Collas & Co.	Caraquet	4	38 00
103076	Dipper	"	12	W. S. Loggie & Co.	Chatham	3	31 50
92412	Dollie Dutton	"	13	John Jones	Little Lamèque	5	45 50
103948	Dora	"	12	Peter Fiott	Caraquet	4	38 00
100999	Dove	"	11	Thomas Ahier	Shippegan	5	43 50
100998	Eagle	"	10	"	"	4	36 00
103590	Eliza	"	13	C. Robin, Collas & Co.	Caraquet	4	39 00
100293	Eliza	"	15	Robert Young	"	3	34 50
96737	Elmina	"	11	Jacques Noel	Lamèque	4	37 00
96723	Emma	"	15	Sebastien Noel	Little Lamèque	4	41 00
100911	Emperor	"	10	Thomas Ahier	Shippegan	4	36 00
100786	Empress	"	12	Robert Young	Caraquet	3	31 50
103776	Esk	"	14	"	"	4	40 00
100772	Estelle	"	13	Philip Rive	"	4	39 00
100787	Ethel	"	11	Robert Young	"	3	30 50
100905	Evangeline	"	10	Philip Rive	"	3	29 50
103001	Falcon	"	10	Thomas Ahier	Shippegan	4	36 00
103077	Fame	"	10	W. S. Loggie & Co.	Chatham	3	29 50
100298	Fisher	"	12	Joseph J. Chiasson	Little Lamèque	4	38 00
61445	Flavie	"	13	Theophile Duguay	Lamèque	4	39 00
96736	Fly	"	14	Wm. Fruing & Co.	Shippegan	4	40 00
61405	Fly	"	11	Alex. McLaughlin	Tracadie	4	37 00
100782	Flying Foam	"	12	Robert Young	Caraquet	3	31 50
100912	Foam	"	10	Thomas Ahier	Shippegan	4	36 00
85699	Four Sisters	"	10	Marcel Caron	Caraquet	4	36 00
100778	Gambetta	"	13	Colson Hubbard	"	3	32 50
100993	Garfield	"	10	Philip Rive	"	3	29 50
100954	Gazelle	"	10	Colson Hubbard	"	5	42 50
100919	Gazelle	"	12	C. Robin, Collas & Co.	"	4	38 00
100968	Gem	"	11	"	"	4	37 00
103766	Genesta	"	12	Thomas Ahier	Shippegan	3	31 50
103282	Gilknockie	"	11	Robert Young	Caraquet	3	30 50
100964	Gladstone	"	10	Philip Rive	"	3	29 50
100910	Gleaner	"	13	Luke Lanteigne	"	4	39 00
107775	Goldseeker	"	13	Peter Fiott	"	3	32 50
100992	Great Mogul	"	11	Philip Rive	"	4	37 00
92418	Grip	"	12	Gervais Chenard	"	4	38 00
100790	Guiding Star	"	11	Robert Young	"	4	37 00
103086	Gypsy	"	20	W. S. Loggie & Co.	Chatham	5	52 50
100956	Harold N.	"	12	"	"	3	31 50
100991	Hercules	"	10	Philip Rive	Caraquet	4	36 00
107771	Heron	"	13	Wm. Fruing & Co.	Shippegan	4	39 00
103950	Hibernia	"	10	"	"	4	39 00
103765	Hirondelle	"	11	Thomas Ahier	"	4	37 00
61425	Hope	"	13	C. Robin, Collas & Co.	Caraquet	3	32 50
100903	Hope	"	12	Robert Young	"	4	38 00
103939	Hope	"	11	Charles Real, jr.	Little Shippegan	3	30 50
100906	Hotspur	"	10	Philip Rive	Caraquet	4	36 00
103779	Ibis	"	11	Wm. Fruing & Co.	Shippegan	4	37 00
103931	Irene	"	12	"	"	4	38 00
96724	Isabel	"	11	"	"	4	37 00
103281	Japan	"	11	Robert Young	Caraquet	4	37 00
103289	Jersey Lily	"	12	Thomas Ahier	Shippegan	3	31 50

## SESSIONAL PAPER No. 22

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
100959	John B. ....	Chatham .....	11	W. S. Loggie & Co. ....	Chatham .....	4	37 00
100965	Josephine .....	" .....	11	Philip Rive. ....	Caraget. ....	4	37 00
103949	Kingfisher .....	" .....	13	Wm. Fruing & Co. ....	" .....	4	39 00
100981	Kite. ....	" .....	11	C. Robin, Collas & Co. ....	" .....	4	37 00
103288	Kite. ....	" .....	10	Thomas Ahier .....	Shippegan .....	4	36 00
107774	Klondyke .....	" .....	14	Peter Fiott .....	Caraget. ....	4	40 00
103283	Koh-i-noor. ....	" .....	13	Philip Rive. ....	" .....	4	39 00
103089	Lady Maud. ....	" .....	11	" .....	" .....	5	43 50
103003	Lark. ....	" .....	10	Thomas Ahier .....	Shippegan .....	5	42 50
100951	Leo. ....	" .....	13	Hy. Lanteigne. ....	Caraget. ....	4	39 00
107773	L'Etoile. ....	" .....	15	Prudent Gallien. ....	" .....	4	41 00
109972	Lizzie D. ....	" .....	11	Robert Young. ....	" .....	4	37 00
100902	Lord Stanley. ....	" .....	10	Wm. Fruing & Co. ....	Shippegan .....	3	29 50
100980	Lynx. ....	" .....	11	C. Robin, Collas & Co. ....	Caraget. ....	3	30 50
100955	Majestic .....	" .....	10	Colson Hubbard .....	" .....	5	42 50
107779	Marie. ....	" .....	15	Gaspard Savoy. ....	Shippegan .....	4	41 00
72100	Marie. ....	" .....	11	Onésime Chiasson. ....	Lameque. ....	4	37 00
103278	Marie Celia. ....	" .....	13	P. D. Blanchard. ....	Caraget. ....	4	39 00
100292	Marie Joseph. ....	" .....	12	Lazare Gauvin. ....	Little Lameque. ....	4	38 00
100295	Marie Louise. ....	" .....	18	Joseph A. Paulin. ....	Caraget. ....	4	44 00
103084	Mary Emma. ....	" .....	11	Wm. Fruing & Co. ....	" .....	4	37 00
100781	Mary Louise. ....	" .....	11	Colson Hubbard .....	" .....	4	37 00
100957	Mary R. ....	" .....	12	W. S. Loggie & Co. ....	Chatham .....	4	38 00
103768	Mayflower. ....	" .....	13	C. Robin, Collas & Co. ....	Caraget. ....	3	32 50
107777	May Flower. ....	" .....	11	Octave Benoit. ....	Little Lameque. ....	4	37 00
103088	Max. ....	" .....	10	Maxime Cormier. ....	Caraget. ....	4	36 00
61447	Merida. ....	" .....	13	André D. Aché. ....	Lameque. ....	4	39 00
100779	Mermaid .....	" .....	11	Colson Hubbard .....	Caraget. ....	3	30 50
100300	Mikado. ....	" .....	13	C. Robin, Collas & Co. ....	" .....	4	39 00
100785	Midnight. ....	" .....	12	Robert Young. ....	" .....	4	38 00
88669	Morning Star. ....	" .....	12	Gustave Gionet. ....	St. Rose. ....	3	31 50
100970	Nellie. ....	" .....	11	Dominique Gallien. ....	Caraget. ....	4	37 00
103284	Normandy. ....	" .....	11	Philip Rive. ....	" .....	3	30 50
103004	Oriole. ....	" .....	11	Thomas Ahier .....	Shippegan .....	3	30 50
103005	Osprey .....	" .....	10	" .....	" .....	4	36 00
100297	Palma. ....	" .....	14	Oliver Duguay. ....	Lameque. ....	5	46 50
100776	Patrick .....	" .....	11	Philip Rive. ....	Caraget. ....	3	30 50
103778	Pelican .....	" .....	13	Wm. Fruing & Co. ....	Shippegan .....	4	39 00
103777	Penguin. ....	" .....	13	" .....	" .....	4	39 00
103674	Petrel. ....	" .....	12	Thomas Ahier .....	" .....	4	38 00
96740	Providence .....	" .....	13	Prosper Albert. ....	Caraget. ....	4	39 00
96732	Providence .....	" .....	11	Joseph L. Robichaud. ....	Shippegan .....	4	37 00
72076	Providence .....	" .....	12	Thomas Ahier .....	" .....	3	31 50
100904	P. T. S. ....	" .....	11	J. N. LeBouthillier. ....	Caraget. ....	4	37 00
100979	Ranger. ....	" .....	10	C. Robin, Collas & Co. ....	" .....	3	29 50
103287	Raven. ....	" .....	11	Thomas Ahier .....	Shippegan .....	4	37 00
100775	Red Gauntlet. ....	" .....	11	Philip Rive. ....	Caraget. ....	4	37 00
103272	Red Weasel. ....	" .....	11	A. E. Windsor. ....	Miscou. ....	4	37 00
100952	Replevin .....	" .....	10	C. Robin, Collas & Co. ....	Caraget. ....	4	36 00
103078	Reward. ....	" .....	13	James DeGrace. ....	Shippegan .....	4	39 00
97191	Rita. ....	" .....	12	C. Robin, Collas & Co. ....	Caraget. ....	4	38 00
103946	Robin. ....	" .....	12	Peter Fiott. ....	" .....	3	31 50
103587	Romulus .....	" .....	18	W. S. Loggie & Co. ....	Chatham .....	4	44 00
100908	Rosalie. ....	" .....	10	Edward LeBouthillier. ....	Caraget. ....	4	36 00
100773	Rupert. ....	" .....	12	Philip Rive. ....	" .....	4	38 00
103273	Russell. ....	" .....	10	John M. Ward. ....	Miscou. ....	4	36 00
96727	Ryse. ....	" .....	11	Luc S. Aché. ....	Lameque. ....	4	37 00
74401	Sara. ....	" .....	11	Nazaire Noël. ....	" .....	4	37 00
100907	Sarah. ....	" .....	10	Robert Young. ....	Caraget. ....	3	29 50
103010	Sarah B. ....	" .....	10	J. N. E. Lanteigne. ....	" .....	4	36 00
103584	Saxon. ....	" .....	13	Philip Rive. ....	" .....	4	39 00
100959	Sea Bird. ....	" .....	10	W. S. Loggie & Co. ....	Chatham .....	3	29 50
100914	Sea Flower. ....	" .....	11	C. Robin, Collas & Co. ....	Caraget. ....	4	37 00



LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	N <sup>o</sup> . of Crew paid.	Amount of Bounty paid.
							% cts.
100901	Sea Flower.....	Chatham.....	12	Robert Young.....	Caraquet.....	4	38 00
96731	Sea Star.....	".....	13	Joseph M. Savoy.....	Shippegan.....	4	39 00
100961	Silver Moon.....	".....	14	W. S. Loggie & Co....	Chatham.....	5	46 50
100788	Sir Charles.....	".....	11	Robert Young.....	Caraquet.....	3	30 50
100963	Stanley.....	".....	11	Philip Rive.....	".....	4	37 00
103087	Stanley.....	".....	10	Joseph Bodin.....	Miscou.....	2	23 00
100982	Snowdrop.....	".....	11	C. Robin, Collas & Co.	Caraquet.....	5	43 50
103767	Stella Maris.....	".....	19	Luc Friolet.....	".....	4	45 00
103193	Startle.....	Halifax.....	11	Theotime Blanchard...	".....	3	30 50
103008	St. Joseph.....	Chatham.....	12	Adolphe Aché.....	Lamèque.....	4	38 00
107776	St. Peter.....	".....	12	".....	".....	4	38 00
103772	Surprise.....	".....	10	Thomas Blanchard...	Mizzonette.....	3	29 50
103947	Swallow.....	".....	13	Peter Fiott.....	Caraquet.....	4	39 00
103006	Swallow.....	".....	11	Thomas Ahier.....	Shippegan.....	4	37 00
103762	Swan.....	".....	14	".....	".....	4	40 00
100986	Swift.....	".....	11	Fabien G. Chiasson...	Little Shippegan	4	37 00
103761	Swing.....	".....	11	Agapit A. Albert...	Caraquet.....	3	30 50
100777	Teutonic.....	".....	11	Colson Hubbard.....	".....	5	43 50
96738	Three Brothers...	".....	12	Chas. S. Hachey.....	".....	4	38 00
103082	Thrush.....	".....	10	Thomas Ahier.....	Shippegan.....	3	29 50
100918	Tickler.....	".....	12	C. Robin, Collas & Co.	Caraquet.....	3	31 50
103583	Two Brothers.....	".....	11	W. S. Loggie & Co....	".....	3	30 50
103285	Valkyrie.....	".....	12	Philip Rive.....	".....	3	31 50
103274	Vesuvius.....	".....	10	George Maillet.....	Shippegan.....	4	36 00
103775	Victoria.....	".....	16	W. S. Loggie & Co....	Chatham.....	4	42 00
100995	Voltaire.....	".....	10	Philip Rive.....	Caraquet.....	4	36 00
100966	Von Moltke.....	".....	11	".....	".....	4	37 00
103588	Vulture.....	".....	13	W. S. Loggie & Co....	Chatham.....	5	45 50
96735	White Fish.....	".....	12	Joseph L. Savoy.....	Lamèque.....	4	38 00
100953	White Wings.....	".....	10	Robert Young.....	Caraquet.....	3	29 50
100973	World's Fair.....	".....	11	".....	".....	4	37 00
103079	Wren.....	".....	11	Thomas Ahier.....	Shippegan.....	4	37 00
100920	Zephyr.....	".....	12	C. Robin, Collas & Co.	Caraquet.....	3	31 50

## NORTHUMBERLAND COUNTY.

96725	Bessie T.....	Chatham.....	10	Donald Loggie.....	Church Point. . .	2	23 00
100969	John Bull.....	".....	10	James Anderson...	".....	4	36 00
92420	Mary Louise.....	".....	13	Donald Loggie.....	".....	3	32 50
83096	St. Patrick.....	".....	16	John White.....	Upper Neguac... .	5	41 50

## RESTIGOUCHE COUNTY.

94959	Winnie G. S. . . .	Lunenburg . . .	26	Donald McGregor....	Dalhousie.....	4	52 00
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## ST. JOHN COUNTY.

88253	E. B. Colwell.....	St. John.....	19	Addison Thompson...	Dipper Harbour.	5	51 50
83205	Elsie.....	Windsor.....	10	Wm. A. Hampton.....	St. John, East. .	3	29 50
77783	Lost Heir.....	St. John.....	15	Henry Alston.....	Pisarinco.....	3	34 50
83426	Louisa.....	".....	16	Birstall Hargrove....	Dipper Harbour.	4	42 00
52159	Mary E.....	".....	21	Fred. Buchanan.....	St. John.....	4	47 00



SESSIONAL PAPER No. 22

LIST of Vessels which received Fishing Bounty, &c.—*Con.*

## PROVINCE OF PRINCE EDWARD ISLAND.

## KING'S COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Number of Crew paid.	Amount of Bounty Paid.
							\$ cts.
92675	Can't Help It*.....	Pictou.....	40	John Herring.....	Murray Har. S..	9	103 00
100445	Carrie O.....	Canso.....	12	Albert McLeod.....	".....	4	38 00
83196	Ethel Blanche*.....	Pictou.....	17	George Dunn.....	".....	6	59 00
83196	Ethel Blanche.....	".....	17	Neil C. Penny.....	".....	4	43 00
66749	Flash*.....	Halifax.....	24	Joseph Lane.....	Souris, East....	6	66 00
107190	France and Russie.....	Charlottetown..	27	Simon Cheverie.....	Souris.....	6	66 00
100691	Frances E. Willard*.....	Pictou.....	23	Benj. H. Herring.....	Murray Har. S..	5	58 00
100691	Frances E. Willard.....	".....	23	".....	".....	3	42 50
75552	Hannah Eldridge.....	Charlottetown..	57	Henry Dicks.....	Georgetown.....	7	102 50
75566	Julia A.....	".....	15	Gabriel Billard.....	Beach Point....	4	41 00
75481	Julia Ward*.....	".....	39	Thomas Roberts.....	Murray Harb.,S.	9	102 00
94670	Katie A. Burns.....	Halifax.....	36	Joseph White.....	".....	9	94 50
69105	Lady of the Lake.....	".....	20	Samson Bowdridge.....	Beach Point....	6	59 00
74054	Laura E. Douglas*.....	Barrington.....	39	John Dicks.....	Georgetown.....	5	74 00
100696	Marion Emerson*.....	Pictou.....	30	Reuben Cahoon.....	Murray Harb.,S.	9	93 00
100696	Marion Emerson.....	".....	30	".....	".....	9	88 50
64869	Sarah L. Oxner.....	Halifax.....	34	Edward Delory.....	Georgetown.....	5	66 50
74160	Sea Bird.....	Charlottetown..	20	Phillip Strickland.....	Cape Bear.....	4	46 00
107189	Sea Pearl.....	".....	11	Augustine Boudreau.....	Lower Montague	5	43 50
75895	Two Brothers.....	".....	26	John Gosbee.....	Murray River...	5	58 50
90488	Wave.....	".....	19	James Delorey.....	Georgetown.....	2	32 00

## PRINCE COUNTY.

71310	Black Watch.....	Charlottetown..	23	Benjamin Perry.....	Alberton.....	4	49 00
103771	J. Anny.....	Chatham.....	12	John Poirier.....	Tignish.....	5	44 50
92473	Lucy Louise.....	Charlottetown..	19	James Roach.....	Malpeque.....	4	45 00
103592	Rosamond*.....	".....	18	Michael Lynch.....	Tignish.....	†	18 00
94992	Sarah P. Ayer.....	".....	64	John Champion.....	Alberton.....	7	109 50
96926	Sea Foam.....	".....	15	John W. Skerry.....	".....	3	34 50
88518	W. F. Elizabeth.....	Sydney.....	10	Roderick McDougald.....	Port Hill.....	2	23 00

## QUEEN'S COUNTY.

92466	G. H. Gardner.....	Charlottetown..	17	E. Marshall, jr.....	North Rustico..	6	56 00
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\* For 1899.

† Crew not entitled to bounty.

LIST of Vessels which received Fishing Bounty, &c.—*Con.*

## PROVINCE OF QUEBEC.

## GASPÉ COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Number of Crew paid.	Amount of Bounty paid.
							% cts.
103934	Diamond Jubilee...	New Carlisle...	32	D. Hatton & Co. ....	Montreal .....	5	64 00
85399	Minnie May .....	Magdalen Isl'ds.	10	Charles Cormier .....	Amherst .....	4	36 00
193148	River Pride .....	Gaspé .....	52	Alexander & Le Mar- quand .....	Point St. Peters.	9	110 50
94675	Success .....	Halifax .....	15	R. J. Leslie .....	Halifax .....	2	28 00

## SAGUENAY COUNTY.

85756	Aristile .....	Quebec .....	19	Phileas Vezina .....	St. Michel .....	2	32 00
80754	Eugenie .....	" .....	48	André Vigneau .....	Esquimaux Pt.	7	93 50
69382	Marie du SacreCœur	Gaspé .....	46	Alexandre Turbis .....	" .....	10	111 00
75445	Phoenix .....	" .....	28	Napoleon Scherrer .....	" .....	7	73 50
103358	Romeo .....	" .....	22	Louis Pineau .....	Bic .....	2	35 00
75680	Sea Star .....	" .....	52	Fidèle Cormier .....	Esquimaux Pt.	6	91 00
80753	Stella Maris .....	" .....	51	Louis Cummings .....	" .....	10	116 00
107231	Ste. Anne .....	" .....	13	Magloire Chouinard .....	Manicouagan .....	3	32 50
92334	Ste. Marie .....	" .....	53	Pierre Ouelette .....	Quebec .....	6	92 00
66727	Willow .....	Halifax .....	18	Auguste Boulet .....	St. Thomas .....	3	37 50

## APPENDIX No. 3.

# NOVA SCOTIA.

**District No. 1.**—Comprising the four counties of the Island of Cape Breton.

*Inspector A. C. Bertram, North Sydney, C.B.*

**District No. 2.**—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.

*Inspector Robert Hockin, Pictou.*

**District No. 3.**—Comprising the counties of King's, Annapolis, Digby, Yarmouth, Shelburne, Queen's and Lunenburg.

*Inspector L. S. Ford, Milton.*

### DISTRICT No. 1.

#### ANNUAL REPORT ON THE FISHERIES OF CAPE BRETON ISLAND, 1900.

NORTH SYDNEY, C.B., December 31, 1900.

To the Dominion Commissioner of Fisheries,  
Department of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit herewith my annual report of the fisheries for the year 1900, of District No. 1, comprising the four counties of the Island of Cape Breton, together with statistical tables showing in detail the catch of each kind of fish in each section and county, the total value of said catch, as well as the number of people employed in the work, and the classification and value of materials used; also, a brief synopsis of the fishery overseers' reports.

At the outset I regret to have to report a decrease in the value of the total catch of \$228,322. The value of the catch of the previous year was \$1,300,409, and that of 1900, \$1,072,087. This decrease is made up by the returns from the counties of Cape Breton, Inverness and Richmond.

The following table will show more clearly the increase and decrease in each county :—

County.	VALUE.		Increase.	Decrease.
	1899.	1900.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Cape Breton.....	387,260 00	260,105 95	.....	127,154 05
Inverness.....	311,898 75	225,081 48	.....	86,817 27
Richmond.....	473,880 04	456,444 20	.....	17,435 84
Victoria.....	127,370 85	130,455 30	3,084 45	.....
	1,300,409 64	1,072,086 93	.....	231,407 16
				3,084 45
Decrease.....				228,322 71

The kinds of fish which make up the total decrease in the returns from the whole island are pickled salmon, herring, mackerel, lobsters (in shell), cod, haddock, pollock, smelts, oysters and squid. The cause of the marked decrease in the fisheries in Cape Breton, and I may add, in Inverness and Richmond counties as well, is owing to the drain on the fishing districts as a result of the construction of the Dominion Iron and Steel plant in Sydney, as well as the additional employment given in the coal mines this year in Cape Breton county, besides the construction of the railway in Inverness county and development of the mines there. Hundreds of men who formerly were engaged in fishing were employed a good part of the fishing season at good wages at the works above referred to. Not only were hundreds of Cape Breton fishermen employed at these works, but some three thousand fishermen from Newfoundland were also given employment here. As the iron and steel plant construction is about through, many of the fishermen employed will no doubt return to their respective districts to again engage in the prosecution of the fisheries.

I find in the four leading branches of the fisheries, viz.: lobsters, cod, mackerel and herring that there is a decrease this year in all excepting canned lobsters. The fact that there were six more canneries engaged this season than last, accounts for the increased pack of 183,828 pounds. I may add here that in the majority of the districts of the costal waters, lobsters were as plentiful as during any one of the three previous years.

#### COD.

The falling off in the codfishery is greater than any other branch, being 23,900 cwt., the returns from each of the four counties showing a decreased catch. In the early part of the summer, cod, as is invariably the case in recent years, are scarce in the inshore waters, but in the autumn months these fish come inshore, particularly in the costal waters from St. Anns Bay to Cape St. Lawrence, Victoria county. On this stretch of coast, during the month of December, the waters are literally alive with these fish, and the fishermen, in a few hours fishing, when weather permits, fill their boats. Their presence this autumn in such large numbers is no doubt owing to the large run of squid, which preceeded the cod. As codfishery will be continued during the month of January in the costal waters in Victoria county, when weather permits, the returns next year for this county should exhibit a large increase in this branch.

#### MACKEREL.

There is also a decrease in pickled mackerel of 1,670 brls. The falling off in this branch has occurred in the autumn fishery. On their journey south these fish kept out in deep water. The United States mackerel fleet fared very poorly on the Cape Breton coast this fall. Scarcity of fish was the reason given by American seiners, many of of the vessels leaving our coast with less than a third catch.

#### HERRING.

In herring there is a decreased catch of 8,900 barrels of pickled, and 244,660 lbs. in smoked and fresh. This decrease has again occurred in the mid-summer run. This run of herring, as is well known, are large and fat, and when well cured are equal to the Labrador herring of years ago in size and flavour. The spring run of herring are small and are largely used for bait, particularly lobster bait. Attempts were made by some vessel fishermen to throw seines on certain spawning grounds in June when these fish were spawning, but having learned of this I personally notified the captains of the vessels of the consequence if they threw a seine, which they did not do.



## SESSIONAL PAPER No. 22

## SALMON.

In this branch there is an increase in fresh, canned and smoked of 92,052 lbs., while there is a falling off in pickled salmon of 860 brls. The increase in the fresh and the falling off in pickled salmon is owing to the increased demand for the fresh article for the freezers. The fishermen obtain a better price from the owners of freezers than from the fish merchants, who buy these fish to pickle. There is an opening for freezers in Ingonish and Aspy Bay, where enough salmon and mackerel, as well as halibut for two freezers, can be had during the fishing season. There is also a good market abroad for this class of fish, besides the growing market in Cape Breton for fresh fish, as a result of the increased population in the Sydneys and in the mining towns.

## HALIBUT.

The increase of 50,294 lbs. in this branch may be attributed to the more vigorous prosecution in consequence of the demand in the local markets for fresh halibut. This branch should be more vigorously prosecuted in the future as a result of increased local demand for the fresh article. The statistics this year show an increase in all branches of fresh fish as a result of the increased population in the Cape Breton county towns.

## VESSELS AND BOATS.

In 1899 there were 102 vessels and 523 men engaged in the prosecution of the fisheries, against 108 vessels and 656 men this year. There is, however, a decrease in both the number of boats and men. In 1899 there were 3,252 boats employed and 6,244 men, as compared with 3,010 boats and 5,790 men this year. The increase of six in fishing vessels is a favourable feature of the fisheries in this district, and it is to be hoped an increase will occur every year, as vessels can reach the outside well fished banks and engage in the prosecution of the fishery when small boats cannot go out owing to rough weather. With the vessels it is a case of going outside of the Canadian inshore waters and competing with fishermen of other countries in the fish wealth, while the inshore waters are given a chance. There is no doubt there is more money for the fishermen in vessel fishing than in boat fishing, besides less labour.

## BAIT.

The bait question is being solved by the department's system of establishing freezers in different fishing districts. The department in thus assisting in the establishment of 'bait freezers' is rendering good service to the country and it is hoped the fishermen will do their part. They will be the principal gainers, as the success of the department's efforts to assist them will depend on their efforts to assist themselves.

## NEW FISH HATCHERY.

The work of construction of the new fish hatchery on the Margaree River has commenced, and this hatchery, when completed, promises to be one of the best equipped in Canada. The salmon spawn for this hatchery will be taken from the midsummer run of parent fish caught in the Margaree and Little River Cheticamp, and the salmon hatched out in this hatchery will largely be used to stock these two rivers from which the heaviest drain of any rivers in Cape Breton occurs every year, as a result of gill-net fishing in the costal and tidal waters adjacent to these two rivers.

There are two runs of salmon entering the Margaree and Little rivers in Inverness county. The first run make their appearance after the middle of June and the second

run first appear in September. The first run under our present salmon regulations are the commercial fish. The salmon fishing season expires before the September run of salmon make their appearance. It is therefore the first run of salmon which should be captured to supply the hatchery with spawn, being the commercial run of fish so called. The fall or September run, is usually twenty-five per cent greater than the midsummer or our present commercial run. This, I think, is owing to the stocking of the rivers from the Sydney hatchery which took its spawn from the fall run of salmon. The close season for salmon gill-net fishing begins on August 15. The September run, therefor, is of no commercial value, while these fish which spawn later are good food fish in September. I would therefore recommend that in the tidal waters of Margaree and Little rivers, net fishing be prohibited until August 20, and one month be allowed inside to gill-net fishing in these waters until September 20.

#### OYSTERS.

The oyster beds of Malagawatch and River Dennis Basin are much in need of attention, as the beds apparently are becoming extinct. I am of the opinion that the wash from the now cultivated and fertilized farms adjacent these grounds is carrying deleterious matter to the beds to their injury. Mr. Kemp, the expert, upon investigation, I have no doubt, could determine the cause of these once prolific beds becoming extinct. These beds were, years ago, extensively fished and their product found its way to the towns and cities of the provinces, as well as to St. Johns, Nfld., and St. Pierre, Miq. Now the local demand cannot be supplied so limited is this fishery.

#### SYNOPSIS OF FISHERY OVERSEER'S REPORTS FOR THE ISLAND OF CAPE BRETON, 1900.

*Overseer A. R. Forbes, of North Sydney*, reports an increase in mackerel, herring and lobsters over last season and a decrease in cod, haddock, hake and pollock. Lobsters were plentiful and the weather during the season was all that could be desired. Herring, mackerel and halibut met with ready sale. The regulations were well observed.

*Overseer Murdo McLean, of Jacksonville*, reports an increase in herring in his division. The regulations were well observed. A greater quantity of fish was used for home consumption than heretofore.

*Overseer John McLean, of Gabarus Lake*, reports a good catch of herring, mackerel and lobsters, which he attributes to fine weather during the respective seasons. Cod and haddock show a decrease caused by stormy weather during the autumn months.

*Overseer John McCuish, of Bateston*, reports a marked decrease in all branches of the industry in his district this season with the exception of lobsters. This decrease he attributes to scarcity of bait more than to a less vigorous prosecution of the industry. No abuses exist in this district and the regulations were well observed. About ten per cent of the total catch was used for home consumption, the balance being exported to Canadian markets.

*Overseer M. R. McInnis, of Amaguades Pond*, in his report notes a decrease in lobsters owing to a scarcity of these fish and a less vigorous prosecution of the industry. Other branches show an increase over the previous year. About seventy-five per cent of the total catch was exported to Canadian markets; the balance was used for home consumption. The close seasons have been well observed.

*Overseer C. E. Rees, of Port Morien*.—The statistics of this officer show a considerable increase in salmon, lobsters and mackerel, while there is a falling off in cod,

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haddock, pollock and halibut. The cause of the decrease he attributes to a less vigorous prosecution of the industry than formerly. Close seasons were well observed. About 20 per cent of fish taken was exported and the balance used for home consumption.

## INVERNESS COUNTY.

*Overseer D. F. McLean, of Port Hood*, reports a decrease in salmon, mackerel, cod, haddock, hake, alewives and squid, and an increase in lobsters, trout and smelts. The decrease is principally due to a less vigorous prosecution of the industry. The violent storms in September and October did much damage to boats and fishing gear and thus effected the catch to some extent. About 30 per cent of the fish taken in his district was used for home consumption and the remainder exported to foreign countries. No abuses exist in his district, and the several close seasons were well observed. A bait freezer is in course of construction at Port Hood Island, which will doubtless prove quite a boon to fishermen in that locality.

*Overseer J. B. McLellan, of Kingsville*, reports a decrease in all branches of the fisheries in his district this season. This decrease was due to scarcity of fish. The total catch, with the exception of a small portion of herring sold to fishing vessels for bait, was used for home consumption. No illegal fishing came to his notice, the guardians employed in his district having taken the utmost precautions to guard against such.

*Overseer Lewis McKeen, of Mabou*. The returns for the district over which this officer has supervision show a considerable increase in salmon, herring and mackerel. The cause of this increase may be attributed more properly to the fact that these fish were found plentiful than to vigorous prosecution of the industry. Lobsters show a falling off as compared with 1899. This may be accounted for by the fact that the season was late in opening owing to the presence of drift ice on the coast. The price of lobsters, however, ruled higher than in previous years, which made up for the poor catch this season. The regulations were well observed. No abuses exist in his district. The total catch of fish taken in his district was used for home consumption, with the exception of lobsters which were shipped to Halifax.

*Overseer Angus McIntosh, of Pleasant Bay*, reports an increase in salmon, cod and mackerel, and a decrease in lobsters. The cod fishery is not prosecuted to any great extent in his district, and the total catch is used for home consumption. The decrease in lobsters he attributes to a less vigorous prosecution of the industry than formerly, there being one factory less in operation than in the previous year. The close seasons were well observed. The total catch of mackerel was shipped to the United States, while lobsters and salmon were sold in Canada.

*Overseer Wm. Aucoin, of Cheticamp*, reports a decrease in the fisheries of his district this season owing to a less vigorous prosecution of the industry. The fishermen are now turning their attention to other and more remunerative pursuits. Stormy weather also interfered with the fisheries this season, especially in the case of the lobster industry. About 75 per cent of the total catch was disposed of in Canada, the balance being used for home consumption. The close seasons were well observed.

*Overseer Albert Ingraham, of N. E. Margaree*, reports that the close seasons were strictly observed in his district, as well as the Sawdust Act. He recommends that a larger number of guardians be employed during the coming season in order to protect the salmon fishery, now that the new hatchery is under course of construction, and salmon will be required for breeding purposes.

*Overseer A. A. Chisholm, of Margaree Forks*, shows a decrease in cod and lobsters, and an increase in salmon, mackerel, hake and halibut. The total catch, with the exception of about 30 per cent, was shipped to Canadian and American markets. The close seasons were well observed, and the guardians employed rendered efficient service.



## RICHMOND COUNTY.

*Overseer D. R. Boyle, of West Arichat*, reports an increased catch of salmon, herring, mackerel, lobsters, fresh and smoked haddock, pollock, eels and squid, and a decrease in cod, haddock (dried), hake and alewives. The decreases, which occur chiefly in dried fish, such as cod and haddock, he attributes to the largely increased quantities of the fresh article disposed of. The increase in lobsters is owing to the reduction in the size limit, and the fact that the run of lobsters along the coast was of a much larger size than usual. With the exception of smelts and live lobsters, which were exported to the United States, all the fish was sold in Canadian markets. About ten per cent was consumed at home. Close seasons were well observed.

*Overseer Arch. Morrison, of Cannes*, reports a decrease in the catch of all kinds of fish in his district, with the exception of lobsters. This industry proved more remunerative than in past years, both with regard to quantity caught and prices obtained. The short catches in other branches he attributes to scarcity of fish. Ninety-five per cent of the total catch was sold in Canada and the remainder used for home consumption. No abuses exist and the close seasons were well observed.

*Overseer Arthur Brymer, of Lower L'Ardoise*, returns a decrease in herring, lobsters, cod and haddock, and an increased catch of mackerel, halibut and pollock. The halibut and pollock industries received more attention from the fishermen this season, there being a better market for these fish than formerly, and this fact doubtless accounts for the increased catch. The lobster fishery was also more vigorously prosecuted on account of the high prices prevailing for these fish. Close seasons were well observed. A large percentage of the total catch was exported to Canadian markets.

## VICTORIA COUNTY.

*Overseer W. R. Moffatt, of Cape North*, reports a decrease in nearly all branches of the industry with the exception of salmon and herring. He attributes this falling off to a less vigorous prosecution of the industry than formerly. Many of the fishermen have abandoned their calling to secure employment at the iron and steel works under course of construction at Sydney. Herring were more plentiful than for many previous years. About 95 per cent of the total catch of all kinds of fish for his district was exported to Canadian and American markets and the balance used for home consumption. Close seasons were well observed.

*Overseer D. P. Montgomery, of Neils Harbour*.—The returns of this officer exhibit a decrease in herring and mackerel over the previous year and about an average catch in other branches. Dogfish interfered with the prosecution of the industry to some extent. No abuses exist and the close seasons were observed. About 90 per cent of the total catch is sold in Canada.

*Overseer Alex. Morrison, of Wreck Cove*, reports an increase in mackerel, herring and lobsters, while there is a falling off in the codfishery. This falling off he attributes to the fact that fishermen who previously engaged in this industry turned their attention this season to lobster fishing, as this branch proved more remunerative than in past seasons. The total catch of lobsters and salmon were shipped to Halifax. Of the other branches, about one half the catch was used at home. Close seasons were well observed.

*Overseer Angus McLean, of Ingonish*.—This officer's returns will exhibit a decrease in herring, mackerel, cod and haddock. The decrease in the above named branches is principally due to a less vigorous prosecution of the industry than formerly, fishermen this year turning their attention to other pursuits. Lobsters show only an average catch. About 5 per cent of the total catch is used for home consumption, the remainder is exported to Canadian markets.



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*Overseer Chas. McRae, of Middle River*, reports a slight decrease in all branches of the industry this season owing to a less vigorous prosecution. Storms also did considerable damage and interfered with the fisheries. Sixty per cent of the total catch is disposed of in Canada and the balance used for home consumption. No abuses exist and the close seasons were well observed.

*Overseer Duncan Gillis, of Baddeck*, reports an increase in the total value of fish taken in his district this season, caused by an increased catch of salmon, herring and cod. Mackerel and lobsters exhibit a decrease. About 30 per cent of the total catch was used for home consumption. No abuses exist and the close seasons were well observed.

I have the honour to be, sir,  
Your obedient servant,

A. C. BERTRAM,  
*Inspector of Fisheries.*

## DISTRICT No. 2.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 2, NOVA SCOTIA,  
COMPRISING THE COUNTIES OF ANTIGONISH, COLCHESTER, CUM-  
BERLAND, GUYSBOROUGH, HALIFAX, HANTS AND PICTOU.

PICTOU, NOVA SCOTIA, January 2, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries of District No. 2, Nova Scotia, together with tabulated returns showing the increase or decrease of of each kind of fish.

The estimated value of the total catch for the past season is \$2,112,022, as compared with the estimated value of the catch for the season 1899, \$1,721,734, showing an increase of \$390,288, or nearly 23 per cent over the value of that year. This increase is chiefly attributable to the very large catch of mackerel in some parts of the district.

The following table shows the estimated value of several years' catch since the year 1890, when this district was allotted to me :—

1890.....	\$1,453,015
1891.....	1,640,912
1892.....	1,357,208
1893.....	1,427,605
1894.....	1,510,900
1895.....	1,429,782
1896.....	1,245,463
1897.....	1,461,327
1898.....	1,456,271
1899.....	1,721,735
1900.....	2,112,022

Showing that the results of last season's fishing has been 34 per cent better than the average of the past ten years.

Of the anadromous fishes the reports show that of salmon there is an increase of 24 per cent; shad, a decrease of 42 per cent; smelts, an increase of 3 per cent, and alewives, an increase of 27 per cent.

Of the deep-sea fishes, the catch of halibut show an increase of about  $1\frac{1}{2}$  per cent; cod, a decrease of about 20 per cent; haddock, an increase of about 17 per cent; hake, an increase of about 10 per cent, and pollock, a decrease of about 33 per cent.

Aggregating the catch of the whole cod family and comparing it with last year's (and this because of the fact that the average fisherman rarely can give the quantities of each of the different kinds he has caught), there is a decrease of about 11 per cent.

#### SALMON.

The conditions of this fishery in this district are peculiar, because that a portion of the district is on the Atlantic coast, another on the Straits of Northumberland, and a third on the Bay of Fundy. There have been times when there has been a decrease in some parts and an increase in others, but this season there appears to have been an increase in the catch over the whole district—on the Atlantic coast, of 80 per cent; on the Straits of Northumberland, of 20 per cent, and on the Bay of Fundy, of 10 per cent. In my report of the season of 1896, I noted the fact that the rivers during the months of October and November of that year had been kept brimful owing to the heavy rains, and that the spawning salmon could not easily be molested, and it was expected the results would be beneficial to the future of the fishery. For the protection of the parent fish when in the rivers for spawning purposes, we have to rely upon the energy and faithfulness of the guardians appointed to patrol the rivers. The persons who are likely to violate the regulations are those living near the river, and as the fish do not ascend many of the rivers until the close season, they do not participate in any resulting increase by the protection of the fish, hence the guardians work in an adverse community. Nevertheless there are frequent indications of activity and honest effort upon the part of such officers. Nets are seized and convictions obtained against offenders by their evidence.

#### SHAD.

This fishery exhibits fluctuations which are of a puzzling character without any known change in the conditions regarding their spawning or capture. The returns for the past twelve years give the following figures as the catch for each season:—

	Barrels.
1889 .....	535
1890 .....	750
1891 .....	1,178
1892 .....	1,811
1893 .....	746
1894 .....	981
1895 .....	1,185
1896 .....	1,079
1897 .....	1,382
1898 .....	2,777
1899 .....	3,208
1900 .....	1,375

a decrease of about 43 per cent, and if the fish are estimated at \$10 per barrel, a loss compared with 1899 of \$18,000 to the counties of Cumberland, Colchester and Hants, in this district (for these fish are chiefly taken in the Bay of Fundy). It will be seen, however, that the catch is an average one of the past twelve years, but at the same time is much smaller than the reported results of this fishery twenty-five to thirty years ago.

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## ALEWIVES.

From the counties of Cumberland and Guysborough there are reports of an increased catch. They are said to have been very plentiful at the head of the Bay of Fundy. The returns from the Straits of Northumberland are about the same as last year.

## SMELTS.

Judging from the returns, the quantity of these fish taken was in excess of last season. Owing, however, to the unusually mild weather prevailing during the season, they could not be marketed in good condition and prices were not remunerative.

## HERRING.

The catch of herring has been larger by twenty-five per cent than that of last year, but is under the average of the past twelve years by about 14 per cent. The question is discussed as to the advisability of setting apart a portion of the coast waters in the vicinity of Fishermans Harbour and Port Beckerton. It is argued that in September large quantities of herring are taken which are full of spawn, and that there should be no nets set in this area at that time. I think it will be found, that herring taken at any part of the coast about that period are in the same condition, and that if there be a close season it should apply to the whole coast. One question for examination is whether at that period of the year, herring are to be found more plentiful at the place mentioned than at other parts of the coast. Another is whether these fish frequent the same places for spawning purposes, or do they deposit spawn just where they happen to be at the ripening period. I have understood that such is the case and that no particular portion of the coast can be said to be a spawning resort more than other localities.

## MACKEREL.

The reports show a phenomenally large catch of these fish, being equal to 43,600 barrels, about 170 per cent of an increase over the catch of last year, which was about an average catch of the past twelve years. This increase is largely owing to the unusual catch in Margarets Bay, Halifax County, where more of these fish were taken than have been caught during the past twenty-five years. On other parts of the coast good catches were made, better than last year, but nothing like the quantities obtained in that locality.

## LOBSTERS.

The value of the reported catch of lobsters is just about the same as that of last year. There was a slight increase of about 2 per cent over that of last season from nearly all of the counties interested in this fishery. The returns are better, that is to say, from Halifax and Guysborough on the Atlantic, Antigonish, Pictou and Colchester on the Straits of Northumberland have all had better catches than last year, but Cumberland County officials report a decrease equal to about 15 per cent. It is to be noted that in seasons when the catches from Pictou and Antigonish were less than average, that from Cumberland was more. This season the converse is true. One of the overseers lately appointed, *Mr. Campbell*, in Cumberland County, who has had years of experience as a lobster packer, urges that some measures be adopted for the preservation of spawn lobsters other than the present methods. There is a penalty for having spawn lobsters in possession, not exceeding one hundred dollars, but it would require an officer present at every factory every day to prevent violations, and *Mr. Campbell's* proposition to have the eggs preserved and developed in hatcheries, and the fry placed back into the



ocean to take its chances for life, I believe to be worthy of serious consideration. I have for years believed that this is the best thing that can be done for the fishery in view of our present fishing season, and especially if eggs can be incubated at a cost not exceeding two dollars per million. During the past season the lobster regulation regarding time limits have been well observed, excepting on that part of the coast bordering on the province of New Brunswick, and convictions have been obtained in two cases there and the parties fined forty dollars each. Upon the Atlantic coast, where formerly much illegal fishing existed, there is now practically none, the suspected violators are under five, and if means can be devised to secure convictions in their cases, they will be dealt with severely. Four parties were sent to jail, not having paid their fines for violation of these regulations and it is hoped that these examples will have a deterring effect.

The experiment of freezing fish for bait, which has been begun at Whitehead, Beckerton and Sambro, in this district, and also at Cape George, will be watched with interest. It is argued by some that when herring are on the shore, deep-sea fishes, cod, haddock, &c., will take no other bait; that the same holds good when squid is abundant, and that when neither are present, there are no deep-sea fish either, that therefore the results from freezers, so far as bait is concerned, is problematical.

Fish-ways are required in a number of dams in the district which have been previously reported. Two serviceable structures were completed during the past summer—one at Ingram River and one at Ship Harbour River. The last, however, has not been inspected yet, but I hope to do so as soon as the gaspereaux appear.

### SYNOPSIS OF OVERSEERS REPORTS.

*Overseer McAdam, of Antigonish County*, says that salmon, mackerel and lobsters were more plentiful than the previous year, but owing to the scarcity of bait the cod, haddock and lake fishing were not prosecuted as vigorously as would have been done had bait been available. The freezers at Cape George, it is hoped, will provide sufficient bait when it cannot be obtained otherwise. Close seasons were well observed, guardians rendering efficient service. One infraction only of the fishery laws came to his notice, but he could not procure sufficient evidence to convict. The fish-way at Fraser's Mills, South River, is not in a satisfactory condition.

*Overseer J. W. Davison, of Colchester County*, says the catch of shad was the smallest that has been taken for many years. In former times he has reported as many as 5,000 barrels; last season's catch was only 269. He claims that the falling off is because the shad are not protected during spawning season; that the present close season from Friday evening until Monday morning is useless, for when you get shad up in a small river the use of large nets for three or four days each week must result in enormous destruction, and unless the close season extends during the whole spawning time it is useless. The salmon fishery was satisfactory, being 17 per cent over last year and 214 per cent over 1898. This increase attributes to the disposition of the people to obey the season regulations.

*Overseer James R. Mosher, of Hants County*, joins with *Overseer Davison* in complaints of the inadequacy of protection afforded the spawning shad, which appear in May, and great numbers caught before reaching the spawning resorts. He proposes a close season until June 20, and that all weirs and seines set for shad be compelled to open their gates between Friday night and Monday morning.

*Overseer John Campbell, of Cumberland*, says lobsters have been scarce in the district as compared with other seasons. The bottom that is fished over is mostly mud and sand, which lobsters frequent at shelling time. Some packers favour a later season than the present which ends July 10. Lobsters generally are becoming scarcer owing to the immense amount of gear used over the whole coast, and also to the fact that by reckless men, as many in the business are, the law is not well observed, especially with



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regard to the preservation of the berried female. Many fishermen who are desirous of preserving the fishery are yet careless about returning those fish to the sea, feeling sure that they will be caught and used by those who are indifferent and the shells burned to prevent detection. There seems to be a need of some method of securing the spawn of berried lobsters. Cheap hatcheries should be maintained and an inducement offered to save the spawn. Part of the expense could be met by an additional license tax, for it would be no injustice to factories or fishermen to have to bear part, as it would be for their benefit. The result of the smelt fishery was about the same as last year, but very much less than formerly. Like the lobster they are more vigorously fished for. The gaspereaux fishing is rapidly becoming scarcer owing to the rivers being obstructed by dams. The lobster fishery season regulations were generally well observed. Two or three cases of infraction came to his notice and some of the parties had been convicted and fined.

*Overseer Joseph Davis* says, during the season for catching lobsters the weather was favourable and high prices were received. Salmon were plentiful. Herring scarce but of very superior quality, and they brought a better price. The season has been a fairly prosperous one and the law has been well observed. Only two violations came to his notice ; both offenders were fined.

*Overseer David Reid, Guysborough County, St. Mary's District*, says the salmon fishery is slightly in the increase over 1899. Splendid catches of herring were taken, especially at Drumhead, Fisherman's Harbour and Beckerton. The cod fishery was below last season, owing to rough weather in the autumn months. The guardians were active in the discharge of their duties, however. No violations were reported to him.

*Overseer Gaston, of Halifax*, says the season was a very prosperous one for the fishermen. The close season was well observed, only one case of illegal fishing came to his notice, and proceedings were taken against the offender and he was convicted and fined. There were three fish-ways in his division all in need of repair.

*Overseer George Rowlings, of Halifax*, says that in the cod fishery the boat fishermen did not do nearly so well as last year, owing to the rough weather during the autumn. There was an increase in the alewives, but it was observed that although there are large lakes at the head of Petpeswick and Chezzetcook rivers, and there are no obstructions in the rivers, but no alewives entered them. The department is having a canal built at the entrance of Porter's lake for navigation purposes, which, when completed, the lake should abound with gaspereaux as it formerly did, but owing to the inlet from the sea being frequently closed at spawning times, the fish are scarce. The close season, especially with regard to lobsters, has been well observed. Fishermen do not seem to have any disposition to violate the law as they did a few years ago. At the same time, he urges the patrol of the coast by a steamer, as the only practical way of maintaining the law. Fish-ways should exist in the dam on the Lawrencetown river which is frequented by salmon trout and alewives, but it is completely obstructed by this dam. A new dam has been built at the head of the tide at Ship Harbour with a fish-way in it.

*Overseer Wm. Kennedy, West Halifax*, remarks the very large catch of mackerel in Margaret's Bay. These fish are taken largely by seines. During the fishing season a lookout is kept for signs of mackerel, and when they are in the bay the seine is partly run out. A watchman is stationed in a suitable place, who uses a water-glass and watches the movement of the fish along the bottom. As soon as a favourable opportunity is afforded, the seine is paid out round a school and the lot of fish secured. Sometimes very large hauls are made. Owing to the great quantity of the fish taken, the prices realized were not equal to previous years. He notes the completion of a fish-way at Snake Lake dam, Ingram river. Another is wanted at Boutelier's dam, Nine-mile river.

*Overseer A. J. McDonald, Pictou East*, says spring herring were very plentiful. The lobster factory which had been operated at Lismore in 1899 was closed during the season of 1900. The close seasons were well observed and the rivers faithfully protected by the guardians. Some poachers were seen in disguise in Barney's river, but they escaped arrest and identification.

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*Overseer Nathaniel Forbes* says that the several close seasons were well observed. The lobster regulations coming in force for the first time, setting a time limit for the putting out of traps, was found to have been violated by one of the packers setting his traps too soon, but in view of recent legislation, he was cautioned to remove them and did so after some hesitation. The Sunday law which requires that all nets, whether under license or not, shall be so raised or adapted for the free passage of fish from Saturday night until Monday morning, was found to have been violated. Five nets were seized and confiscated. The fish-gate on the east branch of St. Mary's is in good repair and kept free from rubbish. The rivers were full of water this fall owing to frequent rains and therefore favourable for the salmon fishery.

I have the honour to be, sir, your obedient servant,

ROBERT HOCKIN,  
*Inspector of Fisheries.*

### DISTRICT No. 3.

#### ANNUAL REPORT OF THE FISHERIES OF DISTRICT No. 3, COMPRISING THE COUNTIES OF KING'S, ANNAPOLIS, DIGBY, YARMOUTH, SHELburne, QUEEN'S AND LUNENBURG.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit herewith my annual report on the fisheries of district No. 3, Nova Scotia, together with statistical tables showing in detail the fish caught in each section during the past year. I am pleased to report an increased value in the aggregate of nearly \$300,000.

#### COD.

This important branch of the fisheries, though actively prosecuted, shows a decrease of \$80,000. It is not difficult to explain this falling off. While the bank fishermen have done fairly well, the shore fisheries in many places show a marked decline. One cause may be the increased demand for lobsters, for as a rule all other fishing is neglected during the lobster season. Another reason is the scarcity of bait, not only for the use of fishermen, but the bait that induces the cod and haddock to visit our coast. It is a notable fact that cod feed largely on the small fish that ascend and descend our rivers yearly for spawning, and it needs no logic to show that the inshore fisheries depend to a larger extent than people are inclined to credit, on the free passage of such fish to their spawning grounds. Even mackerel have been found in the fall full of the young 'gaspereaux' about two inches in length, caught in the estuaries of the rivers. The cordon or dog-fish of our coast is a source of loss and annoyance to our fishermen, and if some means were found to make them of commercial value, such as a bounty to manufacture of phosphate manure, it would doubtless remove the pest from our shore.

#### LOBSTERS.

Following closely in value the cod family, lobsters show an increase catch of \$313,161 over that of 1899. This increase is made up by seventeen more canneries using 22,559

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more traps, and 416 more men engaged in the industry than last year. Last year, the value of lobsters shipped fresh in shell was \$459,195, this year \$747,890, showing an increase for 1900 of \$288,695. Of lobsters canned last year the value was \$254,919, and this year \$279,985, an increase of over \$25,000. This increased catch does not of necessity mean that the fish are increasing at that rate, as will readily be seen by the larger number of traps and men engaged in the business. At the same time, it is wonderful to see how they do hold out despite the suicidal attempts of some of the fishermen to drive them out of our waters.

## MACKEREL.

This branch of the fishery shows a marked increase of \$225,000. This increase was confined almost exclusively to the counties of Digby, Yarmouth and Lunenburg. Why they steered clear of Shelburne and Queen's needs investigation. I think in the near future the Departments of Fisheries of Canada and the United States will be found taking into consideration some method to stop this wholesale destruction of mackerel on their way to their spawning grounds in the fall.

## SALMON.

Salmon show a decreased value of over \$3,000. This valuable fishery needs more protection than it has at present. The regulations governing this fishery are neither practical nor profitable, and it is to be hoped they will soon be thoroughly investigated and improved. In the meantime the salmon ascending our rivers run the gauntlet from which few escape. If fishing of all kinds were stopped from sea to lakes, Saturday, Sunday and Monday, this valuable fishery would, in my opinion, soon show a marked improvement. It is a well known fact that more fish are killed above tidal waters on Monday than on any other day of the week. The reason is obvious. The absence of nets and the quiet of Sunday permit them to get to the falls. Give them Monday free from molestation and the question of breeding will be settled.

## HERRING.

These fish show a decreased catch of nearly \$5,000. This fishery seems to be declining year by year, and, as they are largely used for bait, such decline should be seriously considered.

While haddock fishing shows a decrease, halibut has an increase.

## TROUT.

Show an increased value of about \$1,000. It is practically impossible, for obvious reasons, to estimate or in any way secure the number and value of trout caught in our streams. As long as they were considered as sport for the local fishermen and home consumption, they grew and multiplied, but since they became of commercial value and were exported to the United States, all sorts of traps and illegal appliances are used to destroy them. Unless some stringent measures are taken in the near future, there will be few left even for sportsmen. All other kinds of fish have been an average catch. Fishermen, as a rule, have done well financially, and with the later arrangements for freezing bait, they can hopefully look forward to the fisheries of Nova Scotia as a permanent business.

I am, sir, your obedient servant,

L. S. FORD,  
*Inspector, District No. 3.*



## NOVA SCOTIA—FISHERY STATISTICS—District No. 1.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and the Quantity and Value of Fish caught in the Island of Cape Breton, Province of Nova Scotia, for the Year 1900.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.									
		Vessels.			Boats.			Gill Nets.			Trawls.			Salmon, fresh, lbs.	Salmon, smoked, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.										
Cape Breton County.																							
1	Sydney to Glace Bay .....	13	230	4200	88	116	1725	190	1210	24800	6080	190	1900	500	.....	.....	1264	37000	900	1000	47	38400	1
2	North Sydney to Ball's Creek .....	2	60	380	8	22	525	38	52	1040	280	4	50	500	.....	.....	1050	.....	.....	2000	.....	.....	2
3	George's River to Boisdale .....	.....	.....	.....	.....	21	267	36	28	560	200	8	60	.....	.....	.....	85	.....	.....	.....	.....	.....	3
4	Annapudques Pond to Piper's Cove .....	.....	.....	.....	.....	17	260	29	25	520	143	17	42	.....	.....	.....	110	.....	.....	.....	.....	.....	4
5	Grand Narrows to Christmas Island .....	.....	.....	.....	.....	11	169	20	16	343	90	11	31	.....	.....	.....	72	.....	.....	.....	.....	.....	5
6	Big Beach, Shunacadie and Beavers Cove .....	.....	.....	.....	.....	12	148	15	11	234	62	6	16	.....	.....	.....	33	.....	.....	.....	.....	.....	6
7	North and South Side East Bay and Eskasoni .....	.....	.....	.....	.....	17	196	26	19	406	108	10	22	.....	.....	.....	120	.....	.....	.....	.....	.....	7
8	Big Pond to Irish Cove .....	.....	.....	.....	.....	17	228	22	22	443	132	12	27	.....	.....	.....	62	.....	.....	.....	.....	.....	8
9	Little Bras d'Or .....	4	53	850	20	22	440	44	90	1800	450	55	275	.....	.....	.....	90	900	200	.....	.....	.....	9
10	Little and Big Pond and Sydney Mines .....	.....	.....	.....	.....	14	280	28	60	1200	300	3	15	2700	.....	.....	50	1000	.....	.....	.....	.....	10
11	Gabarus, Grand Mira and Big Lake .....	.....	.....	.....	.....	51	2982	193	245	6975	6235	.....	.....	670	.....	.....	765	.....	.....	.....	.....	.....	11
12	Louisburg and Kennington Cove .....	1	19	200	4	30	500	40	100	2500	750	.....	.....	.....	.....	.....	100	9000	12000	280	109296	12	
13	Big Lorraine .....	.....	.....	.....	.....	30	750	60	300	7500	2250	.....	.....	4000	.....	.....	5	15000	20000	430	93264	13	
14	Main-a-Dieu and Little Lorraine .....	2	23	600	11	60	1025	138	464	12490	7640	.....	.....	13387	.....	.....	750	.....	.....	61	60960	14	
15	Bauline to Mira River .....	.....	.....	.....	.....	20	278	53	201	4663	4586	.....	.....	1953	.....	.....	395	.....	.....	9	62880	15	
16	Catalone .....	.....	.....	.....	.....	3	30	7	85	1090	800	.....	.....	295	.....	.....	12	.....	.....	.....	.....	.....	16
17	Swatiane Island .....	1	19	600	5	45	1400	120	250	5500	1250	25	250	3000	.....	.....	100	10000	.....	40	.....	.....	17
18	Port Morien and South Head .....	2	37	1200	10	29	677	33	150	3300	1200	59	23	1200	.....	.....	420	.....	.....	200	42	62880	18
19	Black Brook, Wadden's Cove and Mira Gut .....	.....	.....	.....	.....	33	848	46	127	2294	1056	38	15	3000	210	.....	340	.....	.....	26	49440	19	
Totals .....		25	441	8030	146	560	12719	1138	3455	77658	33612	438	2726	31135	210	5	5988	72900	900	35440	995	586312	

\* 14 cod nets valued at \$70.00.



## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scot —Continued.

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.		TOTAL VALUE OF ALL FISH.	Number					
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pillock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or Gas- pereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.			Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	
Cape Breton County.																							
1	Sydney to Glace Bay.....	17 48	10	.....	47	23	200	5	13300	.....	1000	27	.....	.....	.....	.....	33	.....	4350	600	25,268 75	1	
2	North Sydney to Ball's Creek.....	585	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,880 00	2	
3	George's River to Boisdale.....	635	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,980 00	3	
4	Amagadez Pond to Piper's Cove.....	20	300	.....	.....	.....	.....	.....	.....	400	1200	16	10	.....	.....	.....	.....	.....	36	25	2,112 30	4	
5	Grand Narrows to Christmas Island.....	16	180	.....	.....	.....	.....	.....	.....	100	600	2	16	.....	.....	.....	.....	.....	6	14	1,163 80	5	
6	Big Beach, Shunacadie and Beavers Cove.....	15	98	.....	.....	.....	.....	.....	.....	600	700	8	9	.....	.....	.....	.....	.....	17	17	1,793 30	6	
7	North and South Side East Bay and Eskasoni.....	159	139	.....	.....	.....	.....	.....	.....	500	800	15	8	.....	.....	.....	.....	.....	18	17	1,835 90	7	
8	Big Pond to Irish Cove.....	6	130	.....	.....	.....	.....	.....	.....	.....	500	.....	.....	.....	.....	.....	.....	.....	20	18	1,061 00	8	
9	Little Bras d'Or.....	.....	500	1200	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26,295 40	9	
10	Little and Big Pond and Sydney Mines.....	45	.....	.....	900	10	80	2	800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,405 00	10	
11	Gabarus, Grand Mira and Big Lake.....	1200	2065	.....	.....	.....	.....	.....	.....	.....	10000	50	13	.....	.....	.....	.....	.....	80	120	26,295 40	9	
12	Louisburg and Kennington Cove.....	300	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1032	35	44,921 30	11	
13	Big Lorraine.....	200	1100	.....	670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	100	25,058 80	12	
14	Man-a-Dieu and Little Lorraine.....	2555	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1200	300	16,785 10	13	
15	Bulline to Mira River.....	937	.....	.....	821	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1440	27	32,119 40	14	
16	Catalogue.....	450	.....	.....	149	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	821	15	19,269 10	15	
17	Scatarie Island.....	400	.....	.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	120	3	2,083 50	16	
18	Port Morien and South Head.....	2000	.....	.....	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	800	400	15,362 80	17	
19	Black Brook, Wadden's Cove and Mira Gut.....	326	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	190	686	19,674 00	18	
	Totals.....	2157	14593	16 5470	1330	31	200	615	60752	1500	15500	170	152	300	400	201	20	10989	2884	50	217	15,036 50	19
																					260,105 95		



## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.				
		Cod, dried, cwt	Cod, tongues & sounds, brls.	Haddock, fresh lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bass, lbs.	Eels, brls.	Oysters, brls.	Tom Cod, or Frost Fish, lbs.	Squid, brls.		Coarse and mixed fish, brls.	Fish oil, galls.	Fish, as bait, brls.	Fish as Manure, Bbls.
<i>Inverness County.</i>																						
1	Port Hood.....	1500	.....	4000	600	2000	400	.....	.....	100	400	20	.....	.....	.....	.....	50	.....	600	150	30	25,254 80
2	Little Mabon.....	200	.....	400	30	80	40	.....	.....	50	80	.....	.....	.....	.....	.....	5	.....	20	20	.....	1,625 00
3	Seaside.....	50	.....	500	30	80	40	.....	.....	30	100	10	.....	.....	.....	.....	10	.....	20	30	20	4,132 00
4	Little Judique.....	20	.....	300	20	30	.....	.....	.....	100	300	12	4	.....	.....	.....	15	.....	20	50	.....	2,204 50
5	Judique.....	15	.....	100	.....	.....	.....	.....	.....	1500	1600	.....	6	.....	.....	.....	5	.....	10	25	.....	5,051 90
6	Long Point.....	30	.....	400	15	.....	.....	.....	.....	1200	1000	.....	.....	.....	.....	.....	6	.....	12	25	.....	5,459 30
7	Creignish.....	40	.....	500	20	.....	.....	.....	.....	200	100	.....	.....	.....	.....	.....	10	.....	10	30	.....	1,847 00
8	Low Point.....	20	.....	150	10	.....	.....	.....	.....	100	100	.....	.....	.....	.....	.....	7	.....	20	20	.....	860 50
9	Port Hastings.....	25	.....	500	15	.....	.....	.....	.....	200	6000	.....	7	.....	.....	.....	5	.....	40	35	.....	4,702 50
10	Port Hawkesbury.....	50	.....	600	30	.....	.....	.....	.....	500	1400	.....	.....	.....	.....	.....	20	.....	60	15	.....	1,898 50
11	West Bay to Malagawatch.....	90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	25	.....	5,112 50
12	North and South side River Dennis.....	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	11	.....	2,806 50
13	Mabon Harbour and Coal Mines.....	220	.....	.....	.....	.....	.....	.....	.....	120	500	6	100	12	3	.....	10	.....	150	100	.....	5,076 55
14	Port Bain and Broad Cove.....	70	.....	.....	.....	.....	.....	.....	.....	50	250	5000	.....	.....	.....	.....	3	.....	50	35	.....	1,361 10
15	Whycocomagh.....	100	.....	.....	.....	.....	.....	.....	.....	.....	1000	2000	.....	.....	.....	.....	.....	5	50	15	.....	1,962 50
16	Scottsville and Lake Ainslie.....	150	.....	.....	.....	.....	.....	.....	.....	.....	8000	6000	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,580 00
17	Meat Cove, Poll-et's Cove, and Pleasant Bay.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72	700	.....	13,227 50
18	Fishing Cove and Delaney's Cove.....	1600	8	800	115	60	200	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,210 10
19	Cheticamp Lake and Point.....	7047	20	2000	210	105	350	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,748 50
20	Easton Harbour, Little River and Cape Rouge.....	1800	10	.....	750	700	300	300	12000	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48,372 75
21	Grand Etang.....	1050	7	.....	545	600	.....	150	11000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,888 60
22	Friar's Head.....	490	2	.....	87	50	115	19	1500	.....	150	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,172 20
23	Belle Cote, Whale Cove and Chimney Corner.....	1115	1	.....	240	208	278	108	3650	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,527 10
24	Broad Cove Marsh, St. Rose and Loch Leven.....	425	5	.....	500	600	.....	250	11500	1250	400	165	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,901 00
25	Margaree River, Harbour and Island.....	16156	53	10250	3292	4558	1773	831	40620	15080	28130	279	100	216	173	400	942	1136	8019	3116	1973	225,081 00
Totals.....		16156	53	10250	3292	4558	1773	831	40620	15080	28130	279	100	216	173	400	942	1136	8019	3116	1973	225,081 00

Return showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity of Fish, &c.—Nova Scotia—Con.

Number.	DISTRICTS.						FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.				KINDS OF FISH.							Number.
	Vessels.			Boats.			Gill Nets.			Trawls.			Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, salted, bbls.	Herring, salted, bbls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, bbls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.			
	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.													
<i>Richmond County.</i>																								
1	Arichat and Petit de Grat.....	4	103	1250	20	157	2000	214	750	15000	6000	150	660	2500	500	1617	65000	17400	534	53280	1216	1		
2	Cape Auguet, West Arichat, Port Royal and Janvyn Island.....	3	87	1150	18	161	2190	212	888	9700	8725	205	1000	.....	.....	1843	84900	10900	371	35496	730	2		
3	Rocky Bay and Cape Le Rond.....	8	302	6350	87	24	250	35	475	9500	4800	110	550	.....	.....	527	15000	5700	199	17760	210	3		
4	Descouse, Poulamond and Martinique.....	3	70	1260	20	10	140	14	135	2970	420	119	580	.....	.....	273	8200	4200	112	.....	.....	4		
5	St. Peter's.....	15	350	4850	105	31	550	48	165	3300	460	.....	.....	.....	.....	100	.....	25	.....	.....	.....	5		
6	River Bourgeois.....	7	Bruchois St. Louis.....	19	200	25	100	2200	300	5	15	.....	.....	.....	.....	200	.....	15	32304	.....	.....	6		
7	Basin River Inhabitants.....	6	130	2000	25	150	1500	160	1500	30000	4500	.....	.....	.....	.....	2000	.....	50	.....	.....	.....	7		
8	Port Malcolm and Gut of Canso.....	8	312	2400	50	60	600	80	900	1800	2700	.....	.....	.....	.....	1000	.....	500	7392	.....	.....	8		
9	West Bay.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9		
10	Fourchu to St. Esprit.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10		
11	L'Archevêque to Point Michaud.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11		
12	L'Archevêque to Point Michaud.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12		
13	L'Ardoise, Lower L'Ardoise and Rochdale.....	5	101	3475	41	303	6270	619	3940	63950	8900	68	1120	400	.....	11	92000	50000	2230	46944	.....	.....	13	
14	Grand Greve, Indian Reserve and St. Peter's East.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	
Totals .....		52	1455	22935	356	1205	19230	2045	10711	179610	51255	762	4610	4100	1100	21	8930	275600	94305	5101	406152	3308	.....	



## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														FISH PRO-DUCTS.		TOTAL VALUE OF ALL FISH.	Number.				
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked fin- nan haddies.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.			Coarse and mixed fish, brls.	Fish, oil, galls.	Fish as bait, brls.	\$
<i>Richmond County.</i>																							
1	Arichat and Petit de Grat.....	1744	15	126000	1215	80000	130	125	1078	107	.....	.....	20	105	100900	.....	30	215	1360	850	64,807	70	1
2	Cape Auguel, West Arichat, Port Royal and Janvrin Island.....	1615	15	31300	1114	.....	88	58	1766	300	.....	6000	108	80	165000	.....	60	265	300	1160	52,905	20	2
3	Rocky Bay and Cape Le Rond.....	490	6	6200	209	.....	6	3	299	2400	.....	.....	18	22	124000	.....	10	330	95	950	22,900	50	3
4	Descouse, Poulamond and Martinique.....	2388	8	7900	213	.....	5	2	12	7000	.....	11500	15	85	47000	.....	37	215	750	1520	22,329	25	4
5	St. Peter's.....	500	.....	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	200	20	3,095	00	5
6	River Bourgeois.....	4000	.....	.....	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1600	80	24,685	80	6
7	Barachois St. Louis.....	500	.....	.....	300	.....	.....	.....	.....	.....	4500	.....	.....	10	.....	.....	.....	.....	200	20	4,115	00	7
8	Basin River Inhabitants.....	150	.....	.....	100	.....	.....	.....	.....	.....	5500	.....	.....	300	.....	.....	.....	.....	60	10	11,278	00	8
9	Port of Malcolin and Gut of Canso.....	150	.....	.....	150	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	60	10	16,461	40	9
10	West Bay.....	250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	60	10	1,750	00	10
11	Fourchu to St. Esprit.....	3100	8	.....	475	.....	125	52	280	10500	1200	.....	80	48	21000	7800	138	2250	695	150	48,225	15	11
12	L'Archevêque to Point Michaud.....	920	33	.....	195	.....	98	265	8300	700	.....	.....	112	29	29000	9300	51	5900	620	91	56,764	40	12
13	L'Ardoise, Lower L'Ardoise and Roch- dale.....	6250	46	20000	2730	.....	70	42	1950	64000	900	.....	810	27	110000	26000	80	920	765	290	110,236	80	13
14	Grand Greve, Indian Reserve and St. Peter's East.....	1125	.....	20000	130	.....	68	14	340	5000	1800	500	54	74	10000	8000	60	120	170	72	16,881	00	14
Totals.....		23382	131	211400	7081	80000	590	296	5990	97607	4600	28000	2067	515	606900	51100	516	10235	6905	5229	456,444	20	

1-2 EDWARD VII., A. 1902

Return showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity of Fish, &amp;c.—Nova Scotia—Con.

Number.	FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.				KINDS OF FISH.											
	Vessels.		Boats.		Gill Nets.		Trawls.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.					
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Number.								Value.				
DISTRICTS.																				
Victoria County.																				
1					37	592	74	51	1980	1290		5900	176	12	180	6500	60			
2					60	992	164	156	6700	2255	5	25	6310		175	3000				
3					85	3400	112	180	3780	1890	10	140			100	6500	265			
4					9	180	15	12	240	240	2	28				2400	78			
5					11	110	17	22	598	198	11	44					46			
6					25	250	65	50	1500	300	15	50			100	40	26			
7	1	10	200	4	18	230	36	46	1380	446		12000		50	50	650	50			
8					37	430	74	105	3130	1050				6	95		75			
9					36	370	72	86	2580	860				10	198		112			
10					24	390	48	232	5104	1636	18	126	600	10	68		35			
11	2	30	500	6	50	1000	100	170	3750	1200	35	275	19600	5	68	24000	229			
12					17	207	22	35	770	177	3	6	1200	2	100	18000	228			
13					37	317	47	82	63	403	27	97	100		20	200				
14					17	146	21	29	42	140	14	48	700		175	21800	400			
15					29	239	33	37	63	189	17	52			54	8300	14			
16					11	150	11	28	42	175	3	10	3500		71	18500	15			
Total...																	1491	111290	10800	1164

## SESSIONAL PAPER No. 22

## RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.												FISH PRODUCTS.		TOTAL VALUE OF ALL FISH.	Number.				
		Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Fels, brls.	Dogfish.	Oysters, brls.	Tomcod or frost fish.			Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.
Victoria County.																					
1	Meat Cove East to Bay St. Lawrence	14304	...	220	22	...	3	...	...	...	...	9500	...	...	...	...	...	130	10	...	6,771 80
2	Dingwall, White Point, Sparlin's Brook and Money Point	20352	...	1075	137	15	17	1500	...	...	...	29000	...	...	...	60	...	1040	115	...	16,242 05
3	New Haven and Neil's Harbour	28224	...	4800	200	...	...	...	...	...	...	...	...	...	...	140	...	4150	512	...	29,875 80
4	Green Cove and South Point	4944	...	300	...	...	...	...	...	...	...	...	...	...	...	12	...	225	30	...	2,409 30
5	New Campbellton and Big Bras D'Or	...	...	135	...	...	...	...	...	...	...	...	...	...	...	200	...	...	...	...	1,380 40
6	Englishtown	...	...	300	100	25	10	...	...	...	...	...	...	...	...	...	...	200	...	...	6,542 75
7	Pathend, Smokey and French River	...	...	75	29	...	...	...	...	...	...	...	...	...	...	...	...	130	20	...	2,051 00
8	Black Rock, Wreck Cove, Breton Cove and Little River	49008	...	280	29	...	...	...	...	...	...	...	...	...	...	...	...	200	38	...	13,747 60
9	Plaster, Indian River and Barasois	...	...	55	14	...	...	...	...	...	...	...	...	...	...	...	...	45	13	...	1,242 00
10	North Bay, Ingouish and Ingouish Ferry	18240	...	1332	528	...	...	...	...	...	...	...	...	...	...	50	142	1100	135	...	16,078 50
11	South Bay and Ingouish Island	9144	...	1999	500	...	...	3000	...	...	...	...	...	...	...	100	907	1600	205	...	23,176 30
12	North Side Little Narrows	...	...	54	...	...	...	...	700	...	...	...	...	...	...	...	13	24	7	...	1,501 70
13	South Side Little Narrows, McKinnon's Harbour and Jamesville	...	39	817	...	...	...	...	...	900	3	9	...	63	2100	...	35	204	67	...	5,184 70
14	Iona and Washabuck	...	28	158	...	...	...	...	...	2400	10	5	...	...	2400	...	21	65	32	...	1,650 50
15	Boularderie, Kemp Head, South Side and Big Harbour	...	23	92	3	...	...	...	...	750	4	11	...	...	...	...	21	70	20	...	1,217 50
16	Plaster Mines and Baddeck Shore	...	42	...	...	...	...	...	...	1400	8	9	...	...	...	...	6	18	10	...	1,943 40
Totals.		144216	90	11734	1562	40	30	4500	700	5450	55	83	38500	113	5300	562	1145	9201	1214	130,455 30	

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## RECAPITULATION

Of the Yield and Value of the Fisheries of the Island of Cape Breton for the Year 1900.

Kinds of Fish.		Quantity.	Rate.	Value.
			\$ cts.	\$ cts.
Salmon, fresh	Lbs.	153,679	0 20	30,735 80
" preserved	"	3,254	0 15	488 10
" smoked	"	210	0 20	42 00
" pickled	Brls.	155	15 00	2,325 00
Herring, pickled	"	20,755	4 00	83,020 00
" fresh or frozen	Lbs.	1,082,140	0 01	10,821 40
" smoked	"	900	0 02	18 00
Mackerel, fresh	"	146,849	0 12	17,621 88
" pickled	Brls.	8,556	15 00	128,340 00
Lobsters, preserved in cans	Lbs.	1,387,714	0 20	277,542 80
" fresh in shell	Cwt.	6,243	5 00	31,215 00
Cod, dried	"	65,865	4 00	263,460 00
" tongues and sounds	Brls.	200	10 00	2,000 00
Haddock, fresh	Lbs.	227,120	0 03	6,813 60
" dried	Cwt.	13,265	3 00	39,795 00
" smoked finnan haddies	Lbs.	80,000	0 06	4,800 00
Hake, dried	Cwt.	5,219	2 25	11,742 75
" sounds	Lbs.	2,269	0 50	1,134 50
Pollock	Cwt.	7,466	2 00	14,932 00
Halibut	Lbs.	203,479	0 10	20,347 90
Trout	"	21,980	0 10	2,198 00
Smelts	"	77,080	0 05	3,854 00
Alewives	Brls.	2,571	4 00	10,284 00
Bass	Lbs.	100	0 05	5 00
Eels	Brls.	966	10 00	9,660 00
Oysters	"	286	4 00	1,144 00
Flounders	Lbs.	607,200	0 05	30,360 00
Tom Cods	"	57,200	0 05	2,860 00
Squid	Brls.	2,221	4 00	8,884 00
Coarse and mixed fish	"	12,536	2 00	25,072 00
Fish oil	Galls.	35,114	0 30	10,534 20
Fish used as bait	Brls.	12,443	1 50	18,664 50
" manure	"	1,973	0 50	986 50
Dogfish	Lbs.	38,500	0 01	385 00
Total for 1900				1,072,086 93
" 1899				1,300,409 64
Decrease				228,322 71

## STATEMENT

SHOWING the Number and Value of Fishing Vessels, Boats, Nets, &c., in District No. 1 of Nova Scotia, for the Year 1900.

	Value.	Total.		Value.	Total.
	\$	\$		\$	\$
108 vessels, 2,304 tons	37,765		80 lobster canneries	48,785	
3,010 boats	58,201		160,853 lobster traps	83,169	
17,395 gill-nets, 351,066 fathoms	120,658				131,954
4 seines, 810 fathoms	1,200		27 freezers and ice houses	7,495	
3 trap-nets	1,500		992 smoke and fish houses	36,128	
1,967 trawls	13,076		281 piers and wharfs	64,262	
31 wiers	620		70 tugs, steamers and smacks	10,440	
77 smelt nets	573				118,325
13,926 hand lines	8,300		Total value		492,172
		241,893			



## SESSIONAL PAPER No. 22

## NOVA SCOTIA—District No. 2.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and the Quantity and Value of Fish in the District No. 2, Province of Nova Scotia, for the Year 1900.

Number.	Districts.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.										
		Vessels.			Boats.			Gill Nets.			Trawls.			Salmon, fresh, lbs.	Herring, salt- ed, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, pre- served, lbs.	Number				
		Number.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.												
<i>Antigonish County.</i>																								
1	Harbour Bouché, Linwood and Cape Jack.	11	150	4	71	776	90	289	6035	1292	44	80	1000	520	5500	1178	244	34752	1					
2	Tracadie, Bayfield, Monks Head and South Side Antigonish Harbour				65	740	73	135	6118	3700	18	65	15000	395	...	7700	5	16224	2					
3	North Side Antigonish Harbour, Lakevale, and South Side Cape George				53	850	73	135	3600	1000	49	250	11700	360	...	...	97	60788	3					
4	North Side Cape George and Georgeville.				27	250	45	67	1600	350	40	300	...	300	...	...	80	15648	4					
5	Malignant Cove, Doctors Brook, Arisaig, Moidart and Knoidart				30	500	55	110	3800	1700	28	140	6000	300	...	1900	139	30624	5					
Totals.		1	11	150	4	246	3116	338	736	21153	8042	179	835	33700	1875	5500	10778	565	158036					
Values														6740	7500	55	1293	8475	31606					

Number.	Districts.	KINDS OF FISH.															Total Value of all Fish.	Number.	
		Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gyspr, brls.	Bass, lbs.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.
<i>Antigonish County.</i>																			
1	Harbour Bouclé, Linwood and Cape Jack.	261	15	48	200	300	500	15	250	6		3825	4	30	231	1343	150	17,008	
2	Tracadie, Bayfield, Monks Head and South Side Antigonish Harbour	33	52	50	150	600	11000	20	2300	40	89	2200			5	10	300	55	11,575
3	North Side Antigonish Harbour, Lakevale, and South Side Cape George	340	25	300	500	900		45				2100	13	40	200	315	210	20,897	
4	North Side Cape George and Georgeville.	60	60	500	900				900			1000	5		300	30	50	7,844	
5	Malignant Cove, Doctors Brook, Arisaig, Moidart and Knoidart.		75	175	1500	3400	100		2	350		2500				800	75	110	17,324
	Totals.	769	327	2398	5150	1900	11500	82	3800	46	89	11025	22	75	1541	2063	575		
	Values	3976	981	5395	2575	190	575	328	380	400	356	581	88	150	462	3095	287		74,648

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RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &amp;c., and Quantities of Fish—Nova Scotia—Con.

Number.	DISTRICTS.			FISHING VESSELS AND BOATS.			FISHING GEAR OR MATERIALS.			KINDS OF FISH.							Number.
	Boats.			Gill Nets.			Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.			
	Number.	Value.	Men.	Number.	Rathoms.	Value.											
<i>Colchester County.</i>																	
1	Sterling.....	23	460	26	20	6300	1880	15600	.....	.....	.....	36722	.....	.....	.....	.....	1
2	Stewiacke.....	100	1000	200	.....	.....	.....	10852	.....	2000	2000	.....	130	1800	20	.....	2
3	Five Islands.....	8	240	32	.....	.....	.....	8000	15	2000	1500	.....	20	200	8	.....	3
4	Economy.....	4	125	14	20	7700	1540	39200	.....	.....	.....	.....	.....	.....	.....	.....	4
5	Little Bass River to Highland Village.....	22	660	52	20	1425	1400	36740	.....	.....	.....	.....	.....	.....	.....	.....	5
6	Great Village to Queen's Village.....	22	500	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
	Totals.....	179	2985	368	62	15425	4820	110392	15	4000	3500	36722	150	2000	28	.....	
	Values.....	.....	.....	.....	.....	.....	.....	22078	60	40	70	7344	600	60	84	.....	









RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia.—*Con.*

FISHING VESSELS AND BOATS.														FISHING GEAR OR MATERIALS.							
Vessels.					Boats.			Gill Nets.				Seines.				Trap Nets.				Trawls.	
Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.		
		\$			\$				\$			\$			\$		\$		\$		
Guysborough County.																					
1	Ecum Secum.	1	30	800	8	45	1000	90	600	150	2	140	100			6	30	1	30		
2	Marie Joseph.					42	1100	80	40	800	200					11	54	2	54		
3	Liscomb, Spanish Ship Bay and Gegogin.					70	1800	130	47	940	235					5	20	3	20		
4	St. Mary's Bay and River.					35	750	70	80	1600	500					3	12	4	12		
5	Wine Harbour.					27	500	40	75	1500	450	2	120	120		5	20	5	20		
6	Indian Harbour and Lake.					40	700	65	80	1600	400					4	16	6	16		
7	Holland Harbour and Indian River.					5	150	10	18	360	80					2	10	7	10		
8	Port Beckerton.	1	11	150	5	50	1450	70	130	2600	650					28	140	8	140		
9	Fisherman's Harbour.					26	820	35	80	1600	400							9			
10	Country Harbour and Isaacs Harbour and River.					40	900	50	150	3000	750					5	20	10	20		
11	Drum Head.					40	850	40	130	2600	650					8	40	11	40		
12	Seal Harbour.					35	780	38	100	2000	500					5	25	12	25		
13	Coddles Harbour.					30	700	35	98	1960	490	1	60	40		5	10	13	10		
14	New Harbour.					50	1000	75	180	3600	900	2	120	75		5	25	14	25		
15	Tor Bay.					50	1100	46	525	10500	3150	20	800	200		12	84	15	84		
16	Larry's River.	2	76	2500	14	190	5700	180	1000	20000	7000	50	2500	550		50	350	16	350		
17	Charles Cove.	2	58	1400	13	95	2000	115	900	18000	6300	35	1350	350		40	280	17	280		
18	Cole Harbour.					60	1500	60	530	10600	3710	15	750	800		30	210	18	210		
19	Port Felix.	3	55	2000	23	140	1800	157	1000	20000	7000	67	2680	737		105	735	19	735		
20	White Head.	2	27	740	11	150	2900	147	900	18000	6300	57	2280	570		137	1099	20	1099		
21	Raspberry and Dover.					59	2205	90	271	5420	1897	40	1600	440		2	800	17	800		
22	Canso and Canso Tittle.	12	285	7200	71	240	10000	250	1000	20000	7000	70	2800	1050		350	21	147	21		
23	Fox Island, Maine.					22	490	26	219	4380	1533	2	220	600		6000	200	1400	22		
24	Half Island Cove.					61	1531	61	473	9460	3811	4	450	1200		9	2800	18	126		
25	Philips Harbour.					40	1010	41	460	9200	3220	2	240	800		24	315	24	315		
26	Queensport.	2	26	1200	11	60	1680	61	800	16000	5600	6	840	2000		8	168	25	168		
27	Pear Brook.					25	500	35	300	6000	2100	2	125	400		50	350	26	350		
28	Halfway Cove.					70	1400	75	645	12900	4515	2	140	225		1	140	27	140		
29	Sandy Cove and Cooks Cove.	1	11	600	5	42	776	70	447	8940	3129	2	1000	1000		67	469	28	469		
																2	280	29	280		

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30 Guysborough and Manchester	1	36	200	2	50'	950'	68	1200	24000	8400	1	100	200	.....	.....	30	210 30
31 Ragged Head	.....	.....	.....	.....	40	720	40	300	6000	2100	2	170	400	.....	.....	28	136 31
32 St. Francis	.....	.....	.....	.....	70	1900	75	800	16000	5600	.....	.....	.....	.....	60	420 32	
33 Oyster Ponds	.....	.....	.....	.....	50	1000	56	700	14000	4900	1	120	400	.....	.....	40	280 33
34 Sand Point	.....	.....	.....	.....	54	1620	60	498	9960	3486	2	200	700	.....	.....	40	280 34
35 Steep Creek	2	47	1500	14	70	1400	77	900	18000	6300	2	200	720	.....	.....	48	336 35
36 Mulgrave and Auld's Cove	3	145	3600	19	40	780	40	340	6800	2380	.....	.....	.....	.....	.....	16	112 36
Totals	32	807	22290	196	2213	55462	2658	15446	308920	105286	387	18005	12677	51	17690	1231	8409

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RETURN Showing the Quantity and Value

														KINDS
Number.	Name.	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, smoked, brls	Lobst.rs, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongue & sounds, brls.	Haddock, fresh, cwt.	Haddock, dried, cwt.
Guysborough County.														
1	Ecum Secum.....	500			152			6	6432	66	250			23
2	Marie Joseph.....	120			160			18	34464	272	352			35
3	Liscombe Spanish Bay and Gegoggin.....	3200		180	175			3	56736	390	400			52
4	St. Mary's Bay & River .....	6500	100	500	120			5	27360		40			10
5	Wine Harbour .....	2600			318			6			51			8
6	Indian Harbour & Lake .....				330			40			35			6
7	Holland's Harbour and Indian River .....	150			48			8			27			5
8	Port Beckerton .....				620			10	34704	290	210			30
9	Fisherman's Harbour .....				536			20	26784	100	86			11
10	Country Harbour and Isaacs Harbour and River .....	1200			511			15	24528	52	116			10
11	Drum Head .....	300			776			5			175			22
12	Seal Harbour .....	400			348			4	54576	546	240			25
13	Coddles Harbour .....				294			6	25200	123	210			37
14	New Harbour .....				682			62	22080		320			102
15	Tor Bay .....				191			26	25248	170	271			71
16	Larry's River .....				695			376			782			374
17	Charles's Cove .....	3000	400		524			139	57408	117	1007	13		669
18	Cole Harbour .....	900			561			122			280	4		538
19	Port Felix .....	800	406		792	30000	30000	214	27456		1412	7		998
20	Whitehead .....	1000	500		712	60000	13200	200	92160	16	1652		40000	583
21	Raspberry and Dover .....	400			145	20000	80000	50	138720	452	404		17000	48
22	Canso & Canso Tittle .....	7000	1000		198	70000	119825	233	138732	1237	4790	18	1900000	1348
23	Fox Island Main .....	2000			25	12000	21600	36			34		1100	11
24	Half Island Cove .....	200			319	14000	37200	100			399		18000	68
25	Philip's Harbour .....				93	11000	15900	20			181		14000	96
26	Queensport .....	1000	500		209	30000	30000	40	81608	99	571		7000	90
27	Peas Brook .....				111	12000	18000	18			156		9000	78
28	Halfway Cove .....				212	10000	30000	16			127		178000	160
29	Sandy Cove and Cook's Cove .....	13000			177	7000	60000	62			191		30000	91
30	Guysborough and Manchester .....	7000			160		30000	26			179		1000	80
31	Ragged Head .....				85		12000	20			53			43
32	St. Francis .....				202		45000	44			112			48
33	Oyster Ponds .....				168	30000	24900	10			17			28
34	Sand Point .....				200	57300	30200	43			26			12
35	Steep Creek .....				300	144000	150000	130			19			5
36	Mulgrave & Aulds Cove .....				100	27300	372000	300	26832		28			2
Totals .....		51270	2906	680	11249	534600	1122625	2433	901028	3930	15203	42	2215100	5757
Values .....		\$ 10254	436	136	44996	5346	134715	36495	180204	19650	60812	420	66453	17271



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of Fish, &amp;c.—Nova Scotia—Continued.

OF FISH.																			Total Value of all Fish.	Number.
Haddock, finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Clams, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish Oil, galls.	Fish as Bait, brls.	Fish as Manure, brls.	Seal Skins, No.	\$		
.....	.....	.....	18	2000	500	400	5	10	.....	.....	800	3	.....	275	500	25	.....	4,806	1	
.....	.....	.....	15	800	160	350	10	15	.....	.....	750	5	.....	300	380	120	.....	11,812	2	
.....	.....	.....	25	3225	1000	1500	40	20	.....	.....	1200	4	.....	380	730	190	.....	18,761	3	
.....	.....	.....	2	300	2800	1000	100	15	.....	.....	800	1	.....	50	350	100	.....	9,180	4	
.....	.....	.....	.....	4500	150	300	.....	5	.....	.....	650	2	.....	60	200	.....	.....	2,998	5	
.....	.....	.....	4	300	350	2000	.....	10	.....	.....	700	3	.....	40	400	.....	.....	3,010	6	
.....	.....	.....	2	200	900	.....	5	5	.....	.....	500	1	.....	25	215	110	.....	1,063	7	
.....	.....	.....	6	1200	.....	.....	10	10	.....	.....	1200	7	.....	200	420	90	.....	13,046	8	
.....	.....	.....	5	200	.....	.....	6	4	.....	.....	800	4	.....	80	320	.....	.....	9,332	9	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	7	3000	.....	1600	8	10	.....	.....	1000	3	.....	110	300	80	.....	9,279	10	
.....	.....	.....	43	2350	.....	.....	12	8	.....	.....	1500	6	.....	200	400	.....	.....	5,213	11	
.....	.....	.....	30	1200	.....	.....	10	6	.....	.....	1200	4	.....	200	300	180	.....	17,168	12	
.....	.....	.....	53	600	.....	.....	8	12	.....	.....	1000	3	.....	195	290	90	.....	8,790	13	
.....	.....	.....	120	2000	.....	4000	15	30	.....	.....	2000	8	.....	300	500	70	.....	11,667	14	
.....	.....	.....	2	418	2450	400	.....	4	.....	.....	.....	.....	.....	40	700	500	80	10,597	15	
.....	.....	.....	435	14	330	6568	600	5	10	.....	.....	.....	.....	50	1100	150	.....	15,808	16	
.....	.....	.....	110	9	412	2532	300	5	.....	.....	.....	.....	.....	54	1100	750	190	26,149	17	
.....	.....	.....	77	100	600	.....	12	7	.....	.....	.....	.....	.....	28	400	180	.....	7,816	18	
.....	.....	.....	31	583	4556	200	36	50	9	.....	7000	30	90	1600	1000	90	.....	29,749	19	
.....	.....	.....	441	20	1188	2200	81	50	.....	.....	4000	.....	70	1900	1500	.....	.....	43,958	20	
.....	.....	.....	105	80	1000	.....	70	.....	.....	.....	.....	10	30	300	3000	300	9	49,353	21	
200000	1057	22	2000	300000	1700	.....	59	90	7	11000	.....	600	400	23000	9000	460	.....	209,320	22	
.....	.....	.....	10	.....	.....	.....	.....	1	.....	.....	.....	500	12	40	20	.....	.....	6,050	23	
.....	.....	.....	32	.....	.....	.....	15	2	.....	.....	.....	200	19	1000	500	470	.....	12,027	24	
.....	.....	.....	2	60	.....	.....	.....	2	.....	.....	.....	11	10	150	40	.....	.....	4,321	25	
.....	.....	.....	242	10	87	.....	5	3	.....	.....	.....	70	22	1000	41	.....	.....	26,651	26	
.....	.....	.....	8	37	.....	.....	3	.....	.....	.....	.....	9	11	100	30	270	.....	4,494	27	
.....	.....	.....	46	10	61	.....	27	2	.....	.....	.....	100	60	4000	200	.....	.....	13,314	28	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	18	4	104	.....	.....	.....	67	5	4	.....	.....	40	10	300	200	.....	.....	14,592	29	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	4	.....	78	.....	700	9000	110	11	10	.....	.....	100	500	180	.....	.....	.....	8,915	30	
.....	7	.....	1	.....	.....	.....	91	7	8	.....	.....	.....	17	200	100	.....	.....	3,133	31	
.....	117	.....	1	.....	.....	.....	155	.....	9	.....	.....	.....	20	350	140	.....	.....	9,378	32	
.....	.....	.....	.....	.....	.....	.....	131	9	1	.....	.....	.....	18	40	100	.....	.....	5,076	33	
.....	2	.....	6	.....	.....	.....	14	2	.....	.....	.....	.....	.....	42	107	.....	.....	6,023	34	
.....	30	.....	23	.....	.....	.....	8	4	.....	.....	.....	.....	.....	30	101	.....	.....	23,023	35	
.....	20	.....	4	.....	.....	.....	3	5	.....	.....	.....	.....	.....	30	50	90	.....	55,541	36	
200000	2570	89	5889	340421	11360	20150	1057	499	48	11000	25100	1624	1061	40297	23194	3005	18	.....	.....	
12000	5782	44	11778	34041	1136	1008	4228	4990	96	550	1255	6496	2122	12087	34790	1503	22	711,117	.....	

1-2 EDWARD VII., A. 1902

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia.—*Con.*

Number.	FISHING VESSELS AND BOATS.				FISHING GEAR AND MATERIALS.						KINDS OF FISH.											
	Vessels.		Boats.		Gill Nets.			Seines.			Trap Nets.		Trawls.	Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	
	Number.	Tonnage.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.										
Halifax County.																						
1	20	700	5	120	1000	400	600	12000	1800	62	6200	1200	7	35	900	1000	700	7000	1000	200000	7000	.....
2	41	900	14	130	1250	300	550	12000	2000	23	2300	4100	80	200	1000	1000	500	10000	2000	300000	2500	4264
3	61	1400	18	490	4500	300	2000	40000	1850	22	2200	1900	6	600	1500	600	1000	12000	1000	300000	4000	.....
4	22	350	6	80	750	76	355	65000	1500	8	800	1200	25	200	1200	300	500	2000	1000	30000	1000	.....
5	98	1600	26	250	2500	250	700	14000	2000	38	2800	9300	56	350	2500	700	2000	25000	700	200000	4000	.....
6	Prospect.	.....	.....	6	150	2000	200	800	16000	4000	80	8000	10000	150	300	1200	100	400	8200	12000	3000	.....
7	Terrence Bay	.....	.....	16	180	2000	210	300	9000	2200	22	2500	4000	200	400	600	300	9200	1000	12000	1000	15120
8	Pennant.	.....	.....	32	10	1000	20	200	6000	1000	10	1200	2000	75	250	300	300	900	1000	1000	500	.....
9	Sambro.	.....	.....	23	45	1000	100	350	9000	2500	4	500	1000	200	800	600	100	10000	9	4500	1000	34560
10	Ketch Harbour.	.....	.....	10	60	900	90	300	8000	2000	12	1200	1500	100	500	500	1500	100000	200	100000	200	.....
11	Portuguese Cove.	.....	.....	5	40	600	75	350	9000	2500	18	1800	2000	20	85	700	4000	700	4000	150000	500	.....
12	Herring Cove.	.....	.....	5	195	3500	40	60	800	1300	100	3000	800	25	2500	2500	130	6000	2000	94000	500	.....
13	Ferguson's Cove.	.....	.....	10	30	500	50	60	15000	500	40	3000	3000	60	275	300	75	1000	2000	200	2000	.....
14	Bedford and Halifax.	.....	.....	50	25	500	40	40	400	128	10	1000	2000	50	250	1000	40	6000	6000	5000	1000	.....
15	East, Passage and Devil's Island.	.....	.....	3	64	1050	52	190	11400	760	.....	.....	.....	.....	575	.....	70	4000	.....	3250	31	.....
16	Cow Bay and Laurence-town.	.....	.....	.....	14	175	12	76	4560	304	.....	.....	.....	.....	325	.....	20	600	.....	650	13	.....
17	Seaforth and Three Fathom Harbour.	.....	.....	19	200	15	80	4800	320	.....	.....	.....	.....	.....	500	.....	15	.....	.....	.....	10	2496
18	West Chezetcook	7	292	6850	77	124	1167	66	398	23880	1592	.....	.....	.....	567	.....	.....	.....	.....	109	18	.....
19	East Chezetcook.	2	85	2000	27	45	480	36	193	6180	412	.....	.....	.....	.....	.....	98	.....	.....	.....	16	.....
20	Petpeswich Harbour.	.....	.....	47	840	41	84	5040	336	.....	.....	.....	.....	.....	66	.....	600	.....	.....	.....	49	21168
21	Musquodibit Harbour.	.....	.....	59	1040	46	100	6000	400	1	75	50	.....	.....	1550	.....	77	500	.....	.....	24	.....
22	Jeddore	2	72	1150	17	80	1000	64	190	11400	760	.....	.....	.....	400	300	267	.....	.....	.....	94	22464
23	Clam Harbour and Owl's Head	4	76	1300	16	82	1690	64	330	19800	1320	1	125	400	400	556	.....	.....	.....	.....	188	23472

## SESSIONAL PAPER No. 22

24 West Ship Harbour.....	2	29	500	6	16	270	11	60	3600	240	2	265	350	.....	.....	144	.....	78	24							
25 East Ship Harbour.....	.....	.....	.....	30	540	35	101	2020	334	.....	.....	.....	.....	.....	562	.....	22	25								
26 Pleasant Harbour and Tangier.....	.....	.....	.....	32	1155	44	109	2180	303	.....	.....	.....	1	220	2	400	.....	30	24							
27 Pope's Harbour and Ger- ard's Island.....	.....	.....	.....	38	898	46	152	3040	561	1	80	50	1	200	.....	.....	524	30	24							
28 Spry Bay, Taylor's Head and Mushaboon.....	.....	.....	.....	75	1594	77	485	9700	1109	.....	.....	.....	.....	.....	.....	1015	.....	60	38							
29 Sheet Harbour and Sober Island.....	2	94	1100	13	53	1255	77	228	4560	809	5	411	265	.....	.....	48	1551	488	47							
30 Beaver Harbour and Port Dufferin.....	.....	.....	.....	10	174	15	22	440	108	.....	.....	.....	.....	.....	350	500	757	84	42							
31 Quoddy and Harrigan Cove	.....	.....	.....	3	45	7	4	80	13	.....	.....	.....	.....	.....	.....	.....	72	8	41							
32 Moser River and Smith's Cove.....	.....	.....	.....	10	134	8	9	180	36	1	80	100	.....	.....	.....	.....	4	3	88							
33 Mitchell's Bay and Ecum Secum.....	.....	.....	.....	30	571	34	43	860	182	7	545	380	.....	.....	.....	.....	.....	2	32							
Totals.....	60	1633	38250	420	2501	33578	2991	9559	338120	35277	391	37456	46895	21	3145	1285	4857	17648	4948	13243	104500	10700	1414400	27729	490520	
Values, \$.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3529	990	52972	1045	214	169728	415935	96105

1-2 EDWARD VII., A. 1902

RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scotia—Continued.

District.	KINDS OF FISH.													FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.	Number.							
	Lobsters, fresh, in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked fin- nan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Clams, brls.	Oysters, brls.			Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.
<i>Halifax County.</i>																									
1 North Shore.....	60	300	3		100		100	20	175		200			5	10	30		8000	6000	40	190	300	100		136,365 1
2 East St. Margaret's.....	70	1400	8	1000	100		1200	150	400	4000	600			30	10	40		6000	12000	60	300	1000	125		89,816 2
3 Indian Harbour.....	1500	2000	6	1000	300		1000	75	400	4000	150			25	2	7		700	10000	40	200	1000	200	14	122,389 3
4 Peggy's Cove.....	300	500	6	500	40		300	30	100	3000				10	2			300	1200	10	30	100	30		26,115 4
5 Dover.....	1500	2000	15	5000	500		1000	1000	300	2000				160	8	60		6000	10000	30	60	1000	200		116,234 5
6 Prospect.....	500	1400	6	1000	100		50	50	100	2000				20	7	50		2500	2000	15	100	800	70		58,490 6
7 Terrence Bay.....	400	1000	6	2000	100		100	90	200	2000	50			40	12	40		2000	700	50	20	700	100	50	29,291 7
8 Pennant.....	6	700	1	1000	40		200	160	100	2000	100			10	1	20		1000	600	10	20	200	25		13,166 8
9 Sambro.....	20	4000	2	12000	100		500	300	1500	12400				4	100	4000		4000	8000	40	5	1200	200	140	47,083 9
10 Ketch Harbour.....	20	2000	1	1500	10		50	100	1000	400				2	15	15		500	800	30	40	100	10		26,000 10
11 Portuguese Cove.....	10	70		4000			10		30	400				2	25	25		500	1000	20	30	90	10		29,308 11
12 Herring Cove.....	10	11000	6	100000			400	200	200	96000				10	5	5		2000	2000	80	30	1000	80		78,360 12
13 Ferguson's Cove.....	6	600	1	20000					30	5000				1	15	15		200	700	20		60	10		7,402 13
14 Bedford and Halifax.....	130	1200	4	30000			10000	10	150	50000	500			10	25	25		500	2000	40		600	10		29,072 14
15 Eastern Passage and Devil's Island.....	13	466	1	14000	103				110	9225				14	6			6000				288	58		5,690 15
16 Cow Bay and Lawrencetown.....		64			13				31	600	500			8	3			3000				40	9		1,128 16
17 Seaforth and Three Fathom Harbour.....		26			16				15	380	180	9000		22	5			5000				20	5	10	1,880 17
18 West Chezetcook.....		4091	1		350				61	7175	3000			27	4			4500				1990	395		23,880 18
19 East Chezetcook.....		1131			198				54	3210	600	1600		6	9			8000				580	118	70	7,219 19
20 Petpeswick Harbour.....	383	277			60				142	2027	500			2	7			5000				200	38		9,424 20
21 Musquodoboit Harbour.....		384			18000	58		6	5	95	2360	1700	5500	2	9	5		5000				216	45		4,619 21
22 Jeddore.....	391	1006			75			60	44	343	3900	250	1000	8	10			9000				595	118	75	15,539 22
23 Clam Harbour and Owl's Head.....	540	452			40				55	2200	400	1200		4	3			9000				210	45	80	15,623 23
24 West Ship Harbour.....		132			19				20	520		800		66	3			2000				75	13		2,898 24



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25 East Ship Harbour.....	177	..	14	.....	..	18	1490	.....	.....	.....	3	.....	1800	.....	.....	139	8	....	3,687 25						
26 Pleasant Harbour and Tan- gier .....	300	.....	24	.....	.....	21	3300	500	.....	9	2	.....	6000	.....	2	295	17	85	11,299 26						
27 Pope's Harbour and Ger- rad's Island .....	29	.....	6	.....	.....	15	1206	.....	.....	.....	.....	.....	.....	.....	2	264	14	128	14,314 27						
28 Spry Bay, Taylor's Head and Mushaboon .....	653	.....	56	.....	60	127	65	2105	200	.....	8	.....	.....	.....	3	389	30	160	29,178 28						
29 Sheet Harbour and Sober Island .....	629	.....	17	.....	.....	21	3490	400	.....	.....	.....	7	.....	.....	6	281	18	140	18,719 29						
30 Beaver Harbour and Port Dufferin .....	416	.....	7	.....	.....	10	440	.....	.....	.....	3	.....	.....	.....	.....	85	5	140	11,454 30						
31 Quoddy and Harrigan Cove 32 Moser River and Smith's Cove .....	1078	.....	3	.....	.....	4	150	200	.....	.....	1	.....	.....	.....	.....	63	2	290	23,699 31						
33 Mitchell's Bay and Ecum Secum .....	88	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	37	4	....	412 32						
.....	258	.....	19	.....	.....	7	2120	100	.....	.....	3	.....	.....	.....	2	119	11	190	18,610 33						
• Totals.....	9222	38485	67	211000	2471	10000	5046	2251	5772	229098	7130	22100	497	124	448	5	98560	57000	500	995	14036	2123	1572	.....	.....
Values .....	\$ 46110	1539 40	670	6330	7413	600	11353	1126	11544	22310	713	1105	1988	1240	896	20	4925	2850	2000	1990	.....	.....	786	.....	1,028,423



## SESSIONAL PAPER No. 22

and the Quantity and Value of all kinds of Fish, &c.—**Nova Scotia**—*Continued.*

KINDS OF FISH.												TOTAL VALUE OF FISH.	Number.
Salmon, fresh, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Cod, dried, cwt.	Pollock, cwt.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Bass, lbs.	Clams, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	
2325					500			54					\$ cts.
1250					1000	4		80	500				731 00
1600	9	300	44	19	400	92	3500	20	1550				760 00
2075					5200	105		10		75	2000	1500	2,271 00
										100			2,225 00
7250	9	300	44	19	7100	201	3500	164	2050	175	2000	1500	
1450	36	6	176	38	710	2010	175	656	205	350	100	75	5,987 00

KINDS OF FISH.																		TOTAL VALUE OF FISH.	Number.
Herring, fresh, lbs.	Mackerel, fresh lbs.	Mackerel, salted, brls.	Lobsters, preserved in can, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspareaux, brls.	Eels, brls.	Clams, brls.	Oysters, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
10000	4000		277248		56			200	6000	25	10	25	20	8	20	1200	920	59,886 00	1
			162336																2
28900	4200	2	17424		52	150	300	3000	200		50		200			200	550	33,042 00	3
			14448					600		2	7	3						2,298 00	4
5100	7600			30	8	15	60	400	2500		55							5,967 00	5
8400	4000		29376		9	32		400	1200		22							3,980 00	6
				120				400										4,507 00	7
								100										8,119 00	8
52400	19800	2	500832	150	145	197	360	4700	9900	27	144	28	220	8	50	1816	1530		
524	2376	30	100167	750	580	444	180	470	495	108	1440	56	880	16	15	2724	765	118,914 00	

1-2 EDWARD VII., A. 1902

## RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 2, Nova Scotia, with Comparative Statements of the Increase or Decrease for the Years 1899 and 1900.

Kinds.		Quantity in 1900.	Rate.	Totals.	QUANTITIES.	
					Increase.	Decrease.
			\$ cts.	\$		
Salmon, fresh.	Lbs.	263,750	0 20	52,750	52,812	
" preserved in cans.	"	2,906	0 15	436		1,094
" smoked.	"	6,128	0 20	1,225	1,078	
Herring, salted.	Brls.	27,185	4 00	108,740	8,313	
" fresh.	Lbs.	753,000	0 01	7,530		1,201,300
" smoked.	"	544,500	0 02	10,890	538,800	
Mackerel, fresh.	"	2,575,003	0 12	309,000		199,756
" salted.	Brls.	30,779	15 00	461,685	28,469	
Lobsters, preserved in cans.	Lbs.	2,476,138	0 20	495,226	117,218	
" fresh in shell.	Cwt.	13,374	5 00	66,870		2,391
Cod, dried.	"	55,010	4 00	220,040		13,279
" tongues and sounds.	Brls.	109	10 00	1,090	23	
Haddock, fresh.	Lbs.	2,433,200	0 03	72,996	451,050	
" dried.	Cwt.	8,693	3 00	26,079		4
" smoked finnan haddies.	Lbs.	210,000	0 06	12,600	59,500	
Hake, dried.	Cwt.	10,403	2 25	23,406	1,217	
" sounds.	Lbs.	7,850	0 50	3,925		1,407
Pollock.	Cwt.	11,841	2 00	23,682		6,214
Halibut.	Lbs.	576,059	0 10	57,606	6,589	
Trout.	"	42,920	0 10	4,292		4,685
Shad.	Brls.	1,375	10 00	13,750	10,167	
Smelts.	Lbs.	223,250	0 05	11,162	6,000	
Alewives or gaspereaux.	Brls.	3,312	4 00	13,248	730	
Bass.	Lbs.	8,675	0 10	867		2,185
Eels.	Brls.	878	10 00	8,780	151	
Clams, in shell.	"	1,049	2 00	2,098		996
Oysters.	"	1,569	4 00	6,276		108
Flounders.	Lbs.	130,525	0 05	6,526	51,125	
Tom cod or frost fish.	"	95,900	0 05	4,795		44,310
Squid.	Brls.	2,146	4 00	8,584		2,181
Coarse and mixed fish.	"	2,188	2 00	4,376		5,215
Fish oil.	Galls.	56,119	0 30	16,834	1,508	
Fish used as bait.	Brls.	33,724	1 50	50,586	5,685	
" products used as manure.	"	8,102	0 50	4,051		1,587
Seal skins.	No.	18	1 25	22	18	
Total for 1900.				2,112,023		



## SESSIONAL PAPER No. 22

## RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, &c., in the District No. 2,  
Province of **Nova Scotia**, for the Year ending December 31, 1900.

Material.	Value.	Total.
	\$	\$
98 fishing vessels (2,535 tons).....	62,790	
5,734 fishing boats.....	108,898	
27,048 gill nets (726,109 fathoms).....	167,998	
780 seines (56,681 fathoms).....	59,837	
72 trap nets.....	20,835	
42 weirs.....	5,230	
149 smelt nets.....	2,420	
8,720 hand lines.....	4,449	
2,710 trawls.....	14,601	
		447,058
127 lobster canneries (1,774 hands).....	119,450	
334,955 lobster trap.....	208,912	
		328,362
57 freezers and ice houses.....	26,855	
1,977 smoke and fish houses.....	75,398	
976 wharfs and piers.....	66,661	
72 tugs, steamers, smacks.....	39,420	
		208,334
Total value.....		983,754

COMPARATIVE STATEMENT of the Value of the Fisheries in each County of District No. 2,  
**Nova Scotia**, for the years 1899 and 1900.

County.	Value in 1899.	Value in 1900.	Increase.	Decrease.
	\$	\$	\$	\$
Antigonish.....	83,161	74,648		8,513
Colchester.....	50,975	44,135		6,840
Cumberland.....	128,149	128,799	650	
Guysborough.....	608,749	711,117	102,368	
Halifax.....	732,678	1,028,423	295,745	
Hants.....	12,916	5,987		6,929
Pictou.....	105,112	118,914	13,802	
Totals.....	1,721,740	2,112,023	412,565 22,282	22,282
Net increase.....			390,283	

## NOVA SCOTIA—

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets,  
Nova Scotia,

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.			KINDS OF FISH.					
		Vessels.				Boats.		Gill Nets.			Salmon, fresh, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.						Value.
	<i>Annapolis County.</i>			\$			\$			\$						
1	Margaretville .....	2	24	300	7	8	150	8	15	700	300	2500	200	....	120	500
2	Point George .....					10	200	15	20	800	400	2000	417	....	95	300
3	Port Lorne .....	4	50	800	12	12	300	30	25	2000	800	....	559	....	300	550
4	Hampton .....					13	300	20	20	1800	700	....	300	....	275	500
5	Phinny and Young's Cove..					20	500	30	30	2000	800	....	400	....	250	475
6	Parker's Cove .....					25	600	40	30	2000	800	....	300	....	300	350
7	Hilsburn's and Delap's Cove	1	16	300	4	20	400	30	50	2500	1000	....	200	....	280	400
8	Victoria Beach .....	2	71	2000	40	30	600	50	50	3000	1500	....	80	....	200	3950
9	Thorne's Cove .....	1	65	1000	17	10	200	12	20	800	400	....	....	....	18	....
10	Clementsport .....	2	41	1000	10	8	200	14	20	1800	500	....	40	4000	....	275
11	Annapolis to County Line..					25	....	....	50	500	60	500	....	....	....	....
12	Lequille River .....					....	....	....	....	....	....	500	....	....	....	....
13	*Round Hill River .....					....	....	....	....	....	....	400	....	....	....	....
14	Inland Lakes .....					....	....	....	....	....	....	....	....	....	....	....
	Totals .....	12	267	5400	90	156	3450	249	330	17900	7260	5900	2496	4000	1838	7300
	Values .....											1180	9984	80	9190	29200

\*Hook and line fishing.

## SESSIONAL PAPER No. 22

## District No. 3.

&c, and the Quantity and Value of Fish caught in **District No. 3**, Province of  
for the Year 1900.

KINDS OF FISH.														FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.	Number.
Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, smoked, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Bass, lbs.	Eels, brls.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
																	\$ cts.	
1	900	110	112	100	85	300	...	...	...	...	...	...	...	150	25	110	4,906 50	1
1	1400	175	118	110	60	7600	...	...	...	...	...	...	...	175	30	120	5,678 00	2
2	1700	210	240	125	95	785	...	...	...	...	...	...	...	195	35	125	7,681 30	3
3	1500	600	400	200	175	...	...	...	...	...	...	...	...	200	45	110	7,982 50	4
2	1000	900	900	400	200	...	...	...	...	...	...	...	...	250	50	25	10,287 50	5
3	1000	950	880	350	300	...	...	...	...	...	...	...	...	200	40	35	9,902 50	6
3	900	800	1000	500	350	...	...	...	...	...	...	...	...	300	45	40	9,634 50	7
8	3000	2500	3800	3000	2200	...	...	...	...	...	...	...	...	1000	110	30	39,720 00	8
...	...	90	400	100	90	...	...	...	...	...	...	...	...	...	25	20	1,537 50	9
1	800	1000	450	200	100	...	...	...	...	...	...	...	...	200	25	20	5,794 00	10
...	...	...	...	...	...	...	...	40	1000	900	...	1000	1500	...	...	...	3,770 00	11
...	...	...	...	...	...	...	300	...	...	200	3	...	...	...	...	...	180 00	12
...	...	...	...	...	...	...	700	...	...	...	4	...	...	...	...	...	190 00	13
...	...	...	...	...	...	...	8000	...	...	...	...	...	...	...	...	...	800 00	14
24	12200	7335	8300	5085	3655	8683	9800	40	1000	1100	7	1000	1500	2670	430	635		
240	366	22005	18675	2542	7310	869	980	400	50	110	70	50	3000	801	645	317	108,064 30	

1-2 EDWARD VII., A. 1902

## RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &amp;c.—Nova Scotia—Continued.

DISTRICTS.				FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.						KINDS OF FISH.										
Number.	Vessels.		Boats.		Gill Nets.		Seines.		Weirs.		Salmon, fresh, lbs.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Number.				
	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Number.	Value.														
Digby County.																								
1	Digby	20	812	23400	182	25	1000	50	75	1500	450	4	800	1050	6	1200	600	100	20000	4500	4000	31350	1	
2	Bay View					7	280	14	21	420	126	3	115	340	2	200	100	50	1000			7690	40	
3	Culloden					8	320	16	24	680	114								8500			250	200	
4	Roseway					5	200	10	15	370	80	2	120	300	3	300	100			1500			75	300
5	Gulliver's Cove					12	480	24	36	720	168	1	65	150	1	150	60		8000			90	460	
6	Centreville					13	650	26	52	1040	312	2	120	150	1	200	100		8000			4450	650	
7	Waterford					4	160	8	12	240	72	3	180	250	2	500	100		18000			2100	540	
8	Sandy Cove					4	160	8	12	240	72	3	180	250	2	500	100		30000			1500	200	
9	Mink Cove					6	240	12	18	360	108	2	180	200	1	50			300			300	130	
10	Little River					9	340	18	27	540	300	2	210	250				10000	8000	6000	6000	900	49	
11	Long Beach					24	1200	48	48	960	245	3	300	275	1	300		15000	15000	600	600	856	4070	
12	Whale Cove					7	250	14			60		1	100	75			12000	5000	5000	5000	440	100	
13	East Ferry					4	225	8	12	240								20000	20000	3000	300	200	360	
14	Tiverton					51	3500	102	90	3000	950	3	250	350				110000	22000	150	1600	320	275	
15	Central Grove					6	180	12	6	120	36							22000	20000	150	1600	320	275	
16	Freeport					48	2900	96	110	2200	540	5	300	600				6000	6000	300	300	254	200	
17	Westport					48	3550	96	96	2350	575	10	600	1500				100500	100500	1500	1500	1500	10500	
18	Smith's Cove					4	160	8	8	230	40	3	90	50	8	1050		75	29000	1125	1300	10500	12	
19	Brighton					6	250	12	10	300	35		5	500				15000	25000	17000	30	95	95	
20	Plympton					6	250	12	10	300	35		5	500				10000	9000	7800	650	20		
21	Doty's Landing					8	240	16	12	460	82	3	120	28	1	75		9000	7800	75	350	20		
22	Weymouth					6	240	16	12	250	60	2	75	50	1	50		9000	7800	75	350	20		
23	New Edinburgh					8	240	16	8	150	48							9000	7800	75	350	20		
24	Belliveau's Cove					12	525	24	24	650	100							9000	7800	75	350	20		
25	Grosses Coques					22	615	39	30	900	150							9000	7800	75	350	20		
26	Church Point					5	125	8										30000	6000	6000	600	160		
27	Comeauville					14	325	25										40500	5400	1200	215	528		
						19	410	25	15	450	75							300	300	360	360	849		













## SESSIONAL PAPER No. 22

&amp;c., and the Quantity and Value of all Fish, &amp;c.—Nova Scotia—Continued.

KINDS OF FISH.												FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.	Number.
Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Alewives or gaspereau, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
2500				46			23		450	125				30	\$ 1,540 00	1
									1400		500				2,640 00	2
										55				40	570 00	3
										10				30	115 00	4
										5				40	195 00	5
10000	250	2500	5000	250	60	190	175						190	150	5,281 80	6
9000	150			90	75	100	90						60	75	3,381 75	7
5000	60		9000	50	25	40	25	200				40	30	20	1,865 75	8
4000	40			50	40	60	30	400					50	50	1,541 20	9
3000	150		75000	90	60	30	90						75	100	3,494 30	10
1500	240		40000	160	70	48	40						80	60	3,076 10	11
4000	200		20000	140	40	30	80	150					50	50	2,926 20	12
200	150		16000	100	60	75	25			68			100	75	2,504 30	13
39200	1240	2500	165000	976	430	573	578	750	1850	263	500	40	635	720	.....	
7840	4960	25	3300	3904	13	1719	1156	75	185	2630	2000	12	952	360	29,131 40	

Return showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c.—Nova Scotia—Continued.

Number.	FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.						KINDS OF FISH.									
	Vessels.			Boats.		Gill Nets.		Seines.		Trap Nets.		Trawls.		Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.							
<i>Lunenburg County.</i>																				
1	Fox Point	110	2700	90	325	6500	1400	27	2700	10500	11	2200	140	4000	40	2000	2000	1		
2	Mill Cove	107	1700	135	500	10000	2500	24	2700	4800	10	2000	150	4000	25	2000	2000	2		
3	The Lodge	33	465	35	105	2100	200	9	950	800	4	800	100	300	45	800	800	3		
4	North-west Cove	45	430	50	75	1500	150	8	900	800	2	200	100	2000	12	2000	2200	4		
5	Aspotogan	35	290	35	150	3000	480	8	900	1000	4	400	80	700	50	2000	2000	5		
6	Bayswater	46	400	40	200	4000	800	8	800	800	2	200	65	1000	12	800	800	6		
7	Blandford	130	2000	180	250	5000	1000	30	2500	2500	7	500	200	1000	100	1000	1000	7		
8	Little Tancook Island	60	800	60	125	2500	500	11	1000	800	3	400	200	800	325	200	800	8		
9	Big Tancook Island	2	80	960	260	375	7500	1500	25	3000	4000	8	1600	450	1000	1000	1200	9		
10	Deep Cove	20	300	20	90	1800	200	6	600	600	1	80	60	125	15	400	400	10		
11	Chester	160	3400	170	900	18000	4500	22	1700	4600	25	6500	6000	500	300	600	4000	11		
12	Malone Bay and Martin's River	25	2000	3900	120	750	15000	4000	12	1000	3200	5	1250	3000	100	500	1500	1000	12	
13	Lunenburg Harbour to Back Harbour and vicinity	74	6979	314055	1229	570	40600	20300	15	1500	3250	30	2100	900	27000	900	2000	8000	13	
14	LaHave River District and vicinity	63	5204	234180	1014	524	49000	24500	5	500	1000	20	4500	700	21000	1200	8000	10000	14	
15	Petite Riviere to County line	9	620	27900	113	114	21000	10500	4	400	900	10	1750	80	2400	200	5000	4000	15	
Totals		173	14883	641935	2768	2398	72530	214	142	21150	39550	142	24480	1680	50400	15845	1050	56925	17680	
Values																3169	210	18896	6831	265200

## SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantities and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	District.	KINDS OF FISH.															TOTAL VALUE.	Number.										
		Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspe- reaux, brls.	Clams, brls.			Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, lbs.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
<i>Lunenburg County.</i>																												
1	Fox Point.	.....	10	500	.....	50	100	.....	300	70	100	.....	.....	.....	.....	.....	12	60000	150	250	1500	340	600	40	42,079	00	1	
2	Mill Cove.	.....	.....	1000	250	.....	160	.....	50	.....	15	.....	.....	.....	12	.....	5	60000	.....	112	1400	290	500	100	44,965	50	2	
3	The Lodge.	.....	7	200	2	300	35	.....	50	.....	16	.....	.....	.....	10	.....	2	3000	.....	20	70	40	70	.....	13,936	50	3	
4	North west Cove.	.....	10	50	.....	.....	25	.....	30	.....	17	.....	.....	.....	8	.....	6	2500	.....	12	65	25	65	.....	34,284	50	4	
5	Aspotogan.	45840	12	18	.....	.....	8	.....	.....	.....	45	.....	.....	.....	.....	.....	7	3	1000	.....	10	75	20	100	.....	40,196	00	5
6	Bayswater.	.....	6	16	.....	.....	1	.....	.....	.....	30	.....	.....	.....	.....	.....	5	3	1700	.....	10	75	20	100	.....	12,736	50	6
7	Blandford.	.....	20	300	.....	.....	210	.....	.....	.....	65	.....	.....	.....	.....	.....	4	12	20000	300	25	300	100	330	.....	19,889	00	7
8	Little Tancook Island.	.....	12	600	.....	.....	200	.....	100	.....	45	430	.....	.....	.....	.....	7	5000	.....	35	1000	600	1000	300	17,458	00	8	
9	Big Tancook Island.	.....	12	1500	650000	500	500	.....	110	100	75	1000	.....	.....	.....	.....	10	.....	35000	.....	10	30	10	30	.....	37,615	50	9
10	Deep Cove.	.....	8	1500	2	.....	10	.....	5	.....	8	.....	.....	.....	.....	.....	5	10	2600	.....	10	30	10	30	.....	12,622	25	10
11	Chester.	50000	10	1000	10	3200	50	.....	70	.....	25	1000	500	5000	100	15	30	50000	1450	70	270	300	500	40	35,062	00	11	
12	Mahone Bay and Martin's River.	.....	13	50000	90	15000	70	.....	360	175	200	36000	200	2000	20	8	18	8000	600	40	110	14000	900	.....	233,121	50	12	
13	Lunenburg Harbour to Back Harbour and vicinity.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	LaHave River District and vicinity.	39936	116	112000	25	.....	4500	.....	430	.....	190	41500	.....	.....	.....	.....	15	.....	400	.....	.....	84000	18	.....	520,041	70	13	
15	Petite Riviere to County line.	18864	169	100690	10	.....	110	600	.....	.....	135	.....	.....	9000	.....	.....	20	.....	600	.....	.....	75268	20	.....	459,474	20	14	
.....	.....	.....	140	7600	.....	.....	30	.....	.....	.....	3	.....	.....	1000	.....	.....	15	.....	700	.....	.....	5700	12	.....	39,639	00	15	
Totals		154640	545	276974	395	68550	6015	600	1505	345	969	79930	700	17000	140	71	151	248800	4200	584	4975	180913	4300	480	.....	.....	.....	
Values		30928	2725	1107896	3950	2056	18045	36	3386	173	1938	7993	70	850	560	568	1510	12440	210	2336	9950	54274	6450	240	.....	1,563,071	15	





## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														FISH PRO-DUCTS.		Seal skins, No.	TOTAL VALUE OF ALL FISH.	Number.
		Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bels, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.				
1	Port Medway.....	21			343										155		5,847 50	1		
2	Mill Village.....								250	1 2400	238	8					2,387 00	2		
3	Greenfield.....								9500		480	5					2,450 00	3		
4	Liverpool, Brooklyn and Gull Island.....	165		900	300	41	35	1000	1000		25		5		200		10,085 50	4		
5	Western Head, Moose Harbour and Black Point.....	30		1200	300	50	25	250							225	20	8,582 50	5		
6	White and Hunt's Points and Summerville.....	66	30240	2000	450	120	15	3000							100	20	21,188 00	6		
7	Port Monton.....	7	53372	13000	750	45	20	200							200	60	84,172 40	7		
8	Ports Joli and L'Hebert.....		1140	2000	360	130	80								20	40	14,284 00	8		
9	Eagle Head and Beach Meadows.....	20	4524	11000	100	5	16								20	10	56,912 80	9		
10	West and East Berlin.....	3			50	12	12										565 00	10		
11	Milton and Kempt.....								2700								1,670 00	11		
	Totals.....	312	89276	30100	2563	403	203	4450	6450	1 3200	889	24	5	920	130	6				
	Values.....	\$ 4680	17855	150500	10612	1209	406	445	645	10	3556	240	10	276	195	7	208,104 70			

RETURN showing the Kinds, Quantities and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	Districts.	FISHING VESSELS AND BOATS.					FISHING GEAR OR MATERIALS.			KINDS OF FISH.						Number.				
		Vessels.		Boats.			Gill Nets.			Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.		Cod, dried, cwt.			
		Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.									Value.		
<i>Shelburne County.</i>																				
1	North-east Harbour, North-west Harbour and Port Saxon.....	6	150	2950	44	20	1200	35	200	6000	1000	400	980	250	3	600	1340	1		
2	Black Point to Round Bay.....	3	65	1800	17	55	3175	125	670	20100	3350	.....	460	.....	17	700	965	2		
3	Roseway and McNutt's Island.....	1	17	500	6	57	3600	125	540	16200	2700	.....	790	150	22	550	495	3		
4	Gunning Cove to Birchtown.....	1	12	350	4	50	1700	100	277	8310	1385	120	850	.....	22	450	440	4		
5	Shelburne and Sandy Point.....	7	500	25000	125	55	1450	110	650	19500	3250	300	960	1000	13	260	11040	5		
6	Jordan River.....	1	100	5000	22	48	1480	70	417	12510	2085	600	525	500	12	225	2535	6		
7	Lockeport.....	15	867	36000	196	160	2600	330	800	27000	4800	250	4600	1500	30	70000	885	16700	7	
8	Barrington.....	4	110	5000	36	60	1700	66	400	12000	1200	225	175	.....	.....	1460	6000	8		
9	Wood's Harbour.....	4	85	4500	30	170	6000	175	665	20000	1900	.....	1100	8000	.....	153408	12000	2000	9	
10	Shag Harbour.....	2	45	800	15	85	4000	85	565	17000	1300	.....	650	1100	.....	40464	1550	1200	10	
11	Bear Point.....	1	20	500	6	25	800	30	40	1200	900	.....	100	5000	.....	102576	600	400	11	
12	Cape Island.....	5	140	4000	50	600	17000	850	3000	90000	9500	.....	4500	.....	11	16000	12000	12		
13	Port La Tour and Baccaro.....	2	120	4000	22	350	6000	175	1830	55000	8000	.....	3200	5000	.....	7488	3000	7000	13	
14	Upper Port La Tour.....	3	50	1500	40	600	50	520	15500	700	700	.....	500	1400	.....	1200	1500	14		
15	Capes Negro and Blanche.....	3	50	1500	20	85	1300	90	482	14500	1200	.....	250	1400	.....	5000	900	15		
16	Cape Negro Island.....	.....	.....	.....	.....	65	1500	65	583	17500	1300	1800	50	700	.....	3000	800	16		
17	Port Clyde.....	.....	.....	.....	.....	6	400	6	20	600	30	.....	50	.....	.....	19200	1000	75	17	
Totals.....		58	2331	93400	633	1931	54505	2487	11659	352920	44000	3695	19840	3000	19770	115	434512	48480	65390	
Values.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	739	79360	30	2372	1735	86903	242400	261560	

## SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantities and Values of Fish, &amp;c.—Nova Scotia—Continued.

Districts.	KINDS OF FISH.					KINDS OF FISH.										TOTAL VALUE OF ALL FISH.		
	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked finnan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.		Fish oil, galls.	Fish as bait, brls.
Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.
<i>Shelburne County.</i>																		
1 Northeast Harbour, North-west Harbour and Pt. Saxon	2	1000	195	...	9	70	1500	...	...	25	2	...	220	8	...	300	25	13,670
2 Black Point to Round Bay . .	2	1200	290	...	16	42	1000	1000	1200	400	10	1500	3000	20	...	600	150	13,171
3 Roseway and McNutt's Island .	1	1000	510	...	7	132	200	200	800	30	10	2100	2400	5	...	500	100	10,932
4 Gunning Cove to Birchtown . .	1	1400	255	...	3	235	175	250	100	40	6	1200	600	5	...	250	100	3,549
5 Shelburne and Sandy Point . .	8	3000	320	...	...	220	1200	7000	300	175	7	800	1000	3	...	3475	650	57,693
6 Jordan River . . . . .	3	800	200	300	25	40	310	1200	500	25	7	1000	1500	3	...	850	200	15,604
7 Lockport . . . . .	15	3000	745	...	25	505	13000	1000	500	5	10	1500	500	10	13	7365	1921	114,663
8 Barrington . . . . .	...	1200	100	...	...	150	250	500	...	425	...	...	400	...	...	250	2600	40,006
9 Wood's Harbour . . . . .	...	500	50	...	...	100	700	...	...	...	...	...	...	...	...	200	7000	115,036
10 Shag Harbour . . . . .	...	600	75	...	...	450	900	300	800	30	...	...	...	...	...	375	800	26,070
11 Bear Point . . . . .	...	150	50	...	...	75	550	...	...	...	...	...	60	...	...	60	600	6,277
12 Cape Island . . . . .	...	7000	3000	...	...	1600	221000	...	...	...	...	...	...	...	...	3000	10000	217,525
13 Port La Tour and Baccaro . .	...	1000	2000	...	...	3100	2500	...	140	...	...	...	...	...	...	2600	1500	73,367
14 Upper Port La Tour . . . . .	...	500	1900	...	...	1000	1200	200	...	...	...	...	...	...	...	150	600	20,100
15 Capes Negro and Blanche . .	...	600	800	...	...	300	900	...	...	...	...	...	...	...	...	130	500	37,658
16 Cape Negro Island . . . . .	...	500	200	...	...	300	2000	...	...	...	...	...	...	...	...	800	1000	22,039
17 Port Clyde . . . . .	...	...	20	...	...	...	...	600	...	150	...	...	...	...	...	...	600	11,320
Totals . . . . .	32	23450	9810	300	60	8319	247385	12250	3400	1445	52	8100	9620	54	13	20905	28346	...
Values . . . . .	320	703	29430	18	135	16638	24739	1225	170	5780	520	405	481	216	26	6271	42519	804,685

Number.	DISTRICTS.						FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.						Number.		
	Yarmouth County.						Vessels.			Boats.			Gill Nets.			Trap Nets.			Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.		Cod, dried, cwt.	
							Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Men.	Number.	Value.									Number.
1	Yarmouth.	8	507	11050	142		53	1060	78	430	2550	10400				4	12000	1000	150	290000		90000	100000		8006	18000	1
2	Port Matland.	6	82	2000	29		27	1500	45	45	900	850				2	5000	825	250	30000	1550	75000	8000		600	10000	2
3	Sandford.						27	540	45	225	4500	1200				3	6500	3000	1300	1400		150000			500	1000	3
4	Arcadia.						28	560	33	45	1200	250							875		500			750	600	4	
5	Pubnico.	17	901	25850	233		50	500	85	150	3000	750				1	2500		100			5000	215000		5000	12000	5
6	Tusket Wedge.	5	260	6800	65		250	1200	250	1800	66000	10000				1	1600	200	250			6000	200000		2000	7500	6
7	Tusket.						45	360	90	150	3000	650						1250	150								7
8	El Brook.						20	120	26	100	2550	500						650									8
9	Salmon River.						35	210	35	120	2100	600							100								9
10	Argyle.																										10
	Totals.	36	1750	45700	469		590	6580	755	3250	97350	18070	11	27600	6925	3175	321400	1550	326500	673000		326500	17450	49350			
	Values																	1385	12700	3214	31	39180	134600	87250	197400		



## SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantities and Value of Fish, &amp;c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.				TOTAL VALUE OF ALL FISH.	Number.		
		Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	
Yarmouth County.																						
1	Yarmouth.....	4	50000	3500	3500	600	16000	15700	3000	20000	.....	2060	.....	.....	25	100	4000	275	300	137,092	50	1
2	Port Maitland.....	.....	72500	.....	15000	60	1850	2200	.....	2000	.....	.....	.....	.....	20	1250	1700	.....	550	65,631	00	2
3	Sandford.....	.....	.....	200	.....	.....	200	5300	.....	2000	.....	.....	.....	.....	500	200	.....	.....	275	33,141	50	3
4	Arcadia.....	.....	.....	150	.....	.....	25	200	.....	2500	.....	65	.....	.....	.....	.....	.....	.....	.....	11,105	00	4
5	Pubnico.....	.....	.....	1815	.....	.....	1460	3000	.....	6500	.....	.....	.....	.....	50	50	2400	100	200	127,410	00	5
6	Tusket Wedge.....	.....	.....	800	.....	120	500	.....	6500	.....	.....	.....	.....	.....	2000	25	500	1000	100	87,080	00	6
7	Tusket.....	.....	.....	.....	.....	.....	.....	.....	.....	350	.....	40	.....	.....	60000	.....	.....	350	.....	9,225	00	7
8	Fel Brook.....	.....	.....	.....	.....	.....	.....	.....	.....	600	.....	35	.....	.....	.....	.....	100	.....	.....	2,900	00	8
9	Salmon River.....	.....	.....	.....	.....	.....	.....	.....	.....	360	.....	25	.....	.....	.....	.....	90	.....	.....	1,955	00	9
10	Argyle.....	.....	.....	55	.....	.....	.....	20	.....	50	.....	12	.....	.....	1500	.....	.....	200	.....	35,262	00	10
Totals.....		4	122500	6520	18500	780	20035	26420	9500	31000	1960	177	2000	68500	120	2400	9300	1215	1325	.....	.....	.....
Values .....		40	3675	19560	1110	1755	40070	2642	950	1550	7840	1770	100	3425	480	4800	2790	1823	662	570,802	00	.....

## RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, Province of Nova Scotia, for the Year 1900.

Kinds of Fish.		Quantity.	Rate.	Value.	Total.
			\$	\$ cts.	\$ cts.
Salmon, fresh	Lbs.	94,175	0 20	18,835 00	
" smoked	"	2,700	0 20	540 00	19,375 00
Herring, salted	Brls.	34,792	4 00	139,168 00	
" fresh	Lbs.	1,220,100	0 01	12,201 00	
" smoked	"	204,400	0 02	4,088 00	155,457 00
Mackerel, fresh	"	503,120	0 12	60,374 40	
" salted	Brls.	18,107	15 00	271,605 00	331,979 40
Lobsters, canned	Lbs.	1,399,928	0 20	279,985 60	
" fresh in shell	Cwt.	149,578	5 00	747,890 00	1,027,875 60
Cod, dried	"	450,440	4 00	1,801,760 00	
" tongues and sounds	Brls.	581	10 00	5,810 00	1,807,570 00
Haddock, dried	Cwt.	66,006	3 00	198,018 00	
" fresh	Lbs.	1,990,430	0 03	59,712 90	
" smoked finnan haddies	"	1,147,550	0 06	68,853 00	326,583 90
Hake	Cwt.	146,104	2 25	328,734 00	
" sounds	Lbs.	41,430	0 50	20,715 00	349,449 00
Pollock	Cwt.	69,274	2 00		138,548 00
Halibut	Lbs.	859,963	0 10		85,996 30
Trout	"	44,300	0 10		4,430 00
Shad	Brls.	375	10 00		3,750 00
Eels	"	520	10 00		5,200 00
Smelts	Lbs.	85,500	0 05		4,275 00
Alewives	Brls.	6,040	4 00		24,160 00
Bass (sea)	Lbs.	1,325	0 10		132 50
Clams	Brls.	778	8 00		6,224 00
Flounders	Lbs.	282,960	0 05		14,148 00
Tom cod	"	83,320	0 05		4,166 00
Squid	Brls.	984	4 00		3,936 00
Coarse and mixed fish	"	43,708	2 00	87,416 00	
" "	Lbs.	340,000	0 02	6,800 00	94,216 00
Fish oil	Galls.	269,198	0 30		80,759 40
Fish as bait	Brls.	57,691	1 50		86,536 50
" as manure	"	100,535	0 50		50,267 50
Seal's skins	"	6	1 25		7 50
Total for 1900					4,625,042 60
" 1899					4,325,453 00
Increase					299,589 60

## SESSIONAL PAPER No. 22

## RECAPITULATION

OF the Value of Fishing Vessels, Nets, &c., in District No. 3, Nova Scotia for the Year 1900.

Material.	Value.	Total.
	\$	\$
351 fishing vessels (21,225 tons) .....	847,085	
6,022 " boats .....	135,120	
532 " dories .....	6,308	
26,930 gill nets (715,748 fathoms) .....	159,270	
265 seines (28,160 fathoms) .....	47,233	
193 trap-nets .....	70,835	
100 weirs .....	18,040	
16 smelts nets .....	682	
3,219 trawls .....	68,532	
4,861 hand lines .....	16,790	
		1,369,895
70 lobster canneries .....	57,550	
203,164 " traps, &c. ....	138,642	
		196,192
160 freezers and ice houses .....	15,270	
1,397 smoke and fish houses .....	79,285	
465 piers and fishing wharfs .....	103,720	
69 fishing tugs or smacks .....	38,335	
		236,610
Total .....		1,802,697

Number of persons employed in the fisheries of the same district.

Men in fishing vessels .....	4,529
" boats .....	6,497
Hands in lobster canneries .....	2,675
Total .....	13,701

1-2 EDWARD VII., A. 1902

## RECAPITULATION

Showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing Materials &c., used in the whole Province of **Nova Scotia** for the Year 1900.

FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.											
Vessels.				Boats.		Gill Nets.				Seines.		Trap Nets.		Trawls.	
Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.
		\$.			\$.				\$.			\$.		\$.	
1 Cape Breton..	25	441	8030	146	560	12719	1138	3455	77658	33612	3	310	900	438	2726
2 Inverness..	28	368	6100	134	742	17249	1696	1908	62146	23412	1	500	300	607	4839
3 Richmond..	52	1455	22935	366	1205	19230	2045	10711	179610	51255				762	4610
4 Victoria..	3	40	700	10	503	9003	911	1321	31652	12379				160	901
5 Antigonish..	1	11	150	4	246	3116	338	736	21153	8042				179	835
6 Colchester..					179	2985	368	62	15425	4820				6	195
7 Cumberland..	2	35	800	5	228	5476	338	826	22810	7844	1	120	65	7	150
8 Guys-borough.	32	807	22290	196	2213	55462	2658	15446	308920	105286	387	18005	12677	51	17690
9 Halifax..	60	1633	38250	420	2501	33578	2991	9559	338120	35277	391	37456	46895	21	3145
10 Hants..					58	1029	66	68	7985	1261	1	1100	200		1255
11 Pictou..	3	49	1300	6	309	7252	350	351	11696	5468				32	155
12 Annapolis..	12	267	5400	90	156	3450	249	330	17900	7260				122	2220
13 Digby..	62	1844	56600	525	442	20530	866	873	21010	5271	40	3685	5658	3	2100
14 King's..	1	14	350	3	71	1080	175	127	5210	2415	3	2450	825	25	155
15 Lunenburg..	173	14883	641935	2768	2398	43155	1546	9375	187500	72530	214	21150	39550	142	24480
16 Queen's..	9	136	3700	41	434	5820	419	1316	33858	9124	5	500	900	4	2000
17 Shelburne..	58	2331	93400	633	1931	54505	2487	11659	352920	44600	3	375	300	8	14500
18 Yarmouth..	26	1750	45700	469	590	6580	755	3250	97350	18070				11	27600
Totals.....	557	26064	947040	5816	14766	302219	19396	71373	1792923	447926	1049	85651	108270	268	93170
															96209



## SESSIONAL PAPER No. 22

## RECAPITULATION—Continued.

SHOWING the Number, the Quantity and Value of Fishing Materials, &amp;c.—Continued.

COUNTIES.	FISHING GEAR OR MATERIALS.				LOBSTER PLANT.				OTHER FIXTURES USED IN FISHING.											
	Weirs.		Smelt Nets		Hand Lines.		Canneries.		Traps.		No. of hands employed		Freezers and Ice Houses		Smoke and Fish Houses		Piers and Wharfs.		Tugs, Steamers and Snacks.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	No. of hands employed	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
1 Cape Breton.	31	620	20	30	3109	1701	13	14450	46351	25730	405	5	2215	239	5380	164	7360	17	6515	
2 Inverness.			32	133	4459	3086	27	13070	49305	24836	334	18	1780	282	10908	79	48370	15	715	
3 Richmond.			24	415	4697	2574	20	15465	51980	25065	1086	3	2500	297	12250	23	3915	32	2980	
4 Victoria.			1	5	1661	939	20	5800	13217	7488	173	1	1000	114	7590	15	4617	6	230	
5 Antigonish.					326	127	6	6800	20800	11610	151	1	1000	116	1056				5	
6 Colchester.	28	4400	8	160	20	25	4	2200	4600	2300	30	9	700	41	1455				6	
7 Cumberland.	4	60	111	1490	100	81	37	22625	46630	25535	343	25	21600	872	46272	336	45372	48	21840	
8 Guysborough.			16	460	3597	2083	32	30000	125575	100222	557	22	3555	871	24543	633	14969	24	17580	
9 Halifax.			1	25	4625	2093	22	15450	89650	38585	305	22		2	20				10	
10 Hants.	10	770					26	33875	47700	30660	388			11	167	1	20		11	
11 Pictou.			13	285	52	40	26	33875	47700	30660	388			11	167	1	20		11	
12 Annapolis.	18	2300			355	355	2	1500	7900	5925	67	13	985	140	4900				12	
13 Digby.	37	5350	12	412	1079	4869	9	13300	30274	23875	834	79	5460	272	13665	74	45775	17	8700	
14 King's.	40	9400			138	138						27	1325	84	3600				13	
15 Lunenburg.					2750	3955	7	2150	13200	9050	488	3	650	351	24050	204	23200	16	1400	
16 Queen's.					745	385	11	2550	11080	4006	345	13	400	82	970	3	900	11	2835	
17 Shelburne.			1	170	5854	5866	24	18250	108210	62686	171	17	2800	404	24400	167	23305	3	7500	
18 Yarmouth	5	990	3	100	3340	1722	17	19800	32500	32500	770	8	3700	64	7700	17	10450	22	17900	
Totals.	173	23890	242	3675	37507	29539	277	225785	698972	430723	6447	244	49620	4366	190811	1722	234643	211	88195	

## RECAPITULATION—Continued.

RETURN Showing the Kinds and Quantities of Fish and Fish Products in the whole Province of Nova Scotia, &amp;c.—Continued.

Number.	KINDS OF FISH.																	Number.			
	Salmon.			Herring.			Mackerel.		Lobsters.		Cod.		Haddock.			Hake.					
	Fresh.	Preserved in Cans.	Salted.	Smoked.	Salted.	Fresh.	Lbs.	Brls.	Fresh.	Lbs.	Preserved in Cans.	Fresh in Shell.	Dried.	Tongues and Sounds.	Fresh.	Dried.	Smoked Fin-nan Haddies.				
	Lbs.	Lbs.	Brls.	Lbs.	Lbs.	Lbs.	Lbs.	Brls.	Lbs.	Brls.	Lbs.	Cwt.	Cwt.	Brls.	Lbs.	Cwt.	Lbs.	Cwt.	Lbs.	Dried.	Sounds.
1 Cape Breton.....	31135	.....	5	210	5988	72900	900	995	35440	995	586512	2157	14593	16	5470	1330	.....	31	200	.....	.....
2 Inverness.....	68534	1978	30	4346	622350	.....	.....	1296	6304	1296	256834	688	16156	53	10250	3292	.....	4558	1773	.....	.....
3 Richmond .....	4100	1100	21	.....	8930	275000	.....	94305	94305	5101	403152	3308	23382	131	211400	7081	80000	590	296	.....	.....
4 Victoria.....	49910	176	99	.....	1491	111290	.....	10800	10800	1164	144216	90	11734	.....	.....	1362	.....	40	.....	.....	.....
5 Antigonish.....	33700	.....	.....	.....	1875	5500	.....	10778	10778	565	158036	.....	769	.....	.....	327	.....	2398	5150	.....	.....
6 Colchester.....	110392	.....	.....	.....	15	4000	3500	.....	7400	50	399000	72	214	.....	2000	28	.....	12	.....	.....	.....
7 Cumberland.....	11800	.....	500	635	52000	530000	.....	1122625	1122625	2433	901028	3930	15203	42	2215100	5757	200000	2570	89	.....	.....
8 Guysborough.....	51270	2906	680	11249	534600	.....	.....	1414400	1414400	27729	480520	9222	38485	67	211000	2471	10000	5046	2251	.....	.....
9 Halifax .....	17648	.....	4948	13243	104500	10700	300	.....	19800	2	500832	150	145	.....	.....	.....	.....	.....	.....	.....	.....
10 Hants .....	7250	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11 Pictou .....	31690	.....	139	52400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12 Annapolis.....	5900	.....	2496	.....	4000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13 Digby.....	1060	.....	275	866100	31850	96925	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14 King's .....	39200	.....	1240	2500	165000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15 Lunenburg.....	15845	.....	1050	4724	18100	56925	17680	154640	545	276974	395	68550	6015	600	1505	345	16	.....	.....	.....	.....
16 Queen's.....	21550	.....	1650	3042	9000	2000	312	89276	30100	2653	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17 Shelburne.....	3965	.....	19840	3000	.....	.....	.....	19770	115	48480	65390	32	23450	9810	300	60	18	.....	.....	.....	.....
18 Yarmouth.....	6925	.....	3175	321400	1550	326500	.....	673000	17451	49350	41	122500	6520	18500	780	.....	.....	.....	.....	.....	.....
Totals.....	511604	6160	155	9038	82732	3055240	749800	57442	3224972	57442	5263780	169195	571315	890	4650750	87964	1437550	161726	51549	.....	.....

## SESSIONAL PAPER No. 22

## RECAPITULATION—Concluded.

RETURN Showing the Kinds and Quantities of Fish and Fish Products in the whole Province of Nova Scotia, &amp;c.—Concluded.

Number.	Counties.	KINDS OF FISH—Con.																		Total Value of All Fish.	Number.
		Pollock.	Halibut.	Trout.	Shad.	Smelts.	Alewives or Gaspereau.	Bass.	Clams.	Eels.	Oysters.	Flounders.	Tom Cod or Frost Fish.	Squid.	Coarse and Mixed Fish.	Fish Oil.	Fish as Bait.	Fish as Manure.	Seal Skins.		
		Cwt.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Brls	Brls	Lbs.	Lbs.	Brls	Lbs.	Galls.	Brls.	Brls.	No.	\$ cts.	
1	Cape Breton.....	615	60752	1600	.....	15500	170	.....	.....	152	.....	300	400	201	20	10988	2884	.....	.....	260,105 95	
2	Inverness.....	831	40620	15080	.....	28130	279	100	.....	216	173	.....	400	400	1136	8019	3116	1973	.....	225,081 48	
3	Richmond.....	5990	97607	4600	.....	28000	2067	.....	.....	515	.....	606900	51100	516	10235	6905	5229	.....	.....	456,444 20	
4	Victoria.....	30	4500	700	.....	5450	55	.....	.....	83	113	.....	5300	562	1145	9201	1214	.....	.....	130,455 30	
5	Antigonish.....	.....	.....	1900	.....	11500	82	3800	.....	46	89	11625	.....	22	75	1541	2063	575	.....	74,648 00	
6	Colchester.....	.....	.....	9050	869	14800	300	1300	350	.....	263	.....	.....	.....	.....	150	20	120	.....	44,135 00	
7	Cumberland.....	156	4440	1680	305	141300	1185	1525	.....	65	992	7400	12300	.....	49	45	4508	1300	.....	128,799 00	
8	Guy'sborough.....	5889	340421	11360	.....	20150	1057	.....	48	499	.....	11000	25100	1624	1061	40297	23194	3005	18	711,117 00	
9	Halifax.....	5772	229098	7130	.....	22100	497	.....	448	124	5	98500	57000	500	995	14036	2124	1572	.....	1,028,423 00	
10	Hants.....	19	.....	7100	210	3500	164	2050	175	.....	.....	2000	1500	.....	.....	.....	.....	.....	.....	5,987 00	
11	Pictou.....	.....	.....	4700	.....	9900	27	1100	28	144	220	.....	.....	.....	8	50	1816	1530	.....	118,914 00	
12	Annapolis.....	3655	8683	9800	40	1000	.....	.....	.....	7	.....	.....	1000	.....	1500	2670	430	635	.....	108,064 30	
13	Digby.....	35515	492345	3750	71	29900	1106	225	707	109	.....	24060	.....	226	34815	54450	22635	97345	.....	1,341,183 75	
14	King's.....	578	750	1850	263	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	635	720	.....	29,131 40	
15	Lunenburg.....	969	79930	700	.....	17000	140	.....	71	151	.....	248800	4200	584	4975	180913	4300	400	.....	1,563,071 15	
16	Queen's.....	203	4450	6450	1	3200	889	.....	24	.....	.....	8100	9620	54	13	20905	28346	.....	6	208,104 70	
17	Shelburne.....	8319	247385	12250	.....	3400	1445	.....	52	.....	.....	2000	68500	120	2400	9300	1215	1325	.....	804,685 30	
18	Yarmouth.....	20035	26420	9500	.....	31000	1960	.....	177	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	570,802 00	
	Totals.....	88551	1639501	109200	1750	3855830	11923	10100	1827	2364	1855	1020685	236420	5351	58432	360431	103858	110610	24	7,809,152 53	

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## RECAPITULATION

OF the Yield and Value of the Fisheries of the **whole** Province of **Nova Scotia** for the Year 1900.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Salmon, fresh . . . . . Lbs.	511,604	0 20	102,320 80	
" preserved . . . . . "	6,160	0 15	924 10	
" smoked . . . . . "	9,038	0 20	1,807 00	
" pickled . . . . . Brls.	155	15 00	2,325 00	107,376 90
Herring, salted . . . . . "	82,732	4 00	330,928 00	
" fresh . . . . . Lbs.	3,055,240	0 01	30,552 40	
" smoked . . . . . "	749,800	0 02	14,996 00	376,476 40
Mackerel, salted . . . . . Brls.	57,442	15 00	861,630 00	
" fresh . . . . . Lbs.	3,224,972	0 12	386,996 28	1,248,626 28
Lobsters, preserved in cans. . . . . "	5,263,780	0 20	1,052,754 40	
" fresh or alive . . . . . Cwt.	169,195	5 00	845,975 00	1,898,729 40
Cod, dried . . . . . "	571,315	4 00	2,285,260 00	
" tongues and sounds . . . . . Brls.	890	10 00	8,900 00	2,294,160 00
Haddock, dried . . . . . Cwt.	87,964	3 00	263,892 00	
" fresh . . . . . Lbs.	4,650,750	0 03	139,522 50	
" smoked finnan haddies . . . . . "	1,437,550	0 06	86,253 00	489,667 50
Hake, dried . . . . . Cwt.	161,726	2 25	363,882 75	
" sounds . . . . . Lbs.	51,549	0 50	25,774 50	389,657 25
Pollock . . . . . Cwt.	88,581	2 00		177,162 00
Halibut . . . . . Lbs.	1,639,501	0 10		163,950 10
Trout . . . . . "	109,200	0 10		10,920 00
Shad . . . . . Brls.	1,750	10 00		17,500 00
Smelts . . . . . Lbs.	385,830	0 05		19,291 00
Alewives . . . . . Brls.	11,923	4 00		47,692 00
Bass . . . . . Lbs.	10,100	0 10		1,004 50
Eels . . . . . Brls.	2,364	10 00		23,640 00
Oysters . . . . . "	1,855	4 00		7,420 00
Clams . . . . . "	1,827			8,322 00
Flounders . . . . . Lbs.	1,020,685	0 05		51,034 00
Tom cod or frost fish . . . . . "	236,420	0 05		11,821 00
Squid . . . . . Brls.	5,351	4 00		21,404 00
Coarse fish . . . . . "	58,432	2 00	116,864 00	
" . . . . . Lbs.	378,500	0 02	7,185 00	124,049 00
Fish oil . . . . . Galls.	360,431	0 30		108,127 70
" as bait . . . . . Brls.	103,858	1 50		155,787 00
" manure . . . . . "	110,610	0 50		55,305 00
Seal skins . . . . . No.	24	1 25		29 50
Total for 1900 . . . . .				7,809,152 53
" 1899 . . . . .				7,347,603 92
Increase . . . . .				461,548 61



## RECAPITULATION

Of the Value of all Fishing Material in the whole Province of Nova Scotia for the Year 1900.

Articles.	Value.	Total.
	\$	\$
557 fishing vessels (26,064 tons).....	947,640	
14,766 " boats.....	302,219	
71,373 gill nets (1,792,923 fathoms) ..	447,926	
1,049 seines (85,651 fathoms).....	108,270	
268 trap nets .....	93,170	
173 weirs.....	23,890	
242 smelt nets.....	3,675	
7,896 trawls.....	96,209	
37,507 hand lines.....	29,539	
277 lobster canneries.....	225,785	2,052,538
698,972 " traps .....	430,723	
244 freezers and ice-houses.....	49,620	656,508
4,366 smoke and fish-houses.....	190,811	
1,722 piers and wharfs (fishing).....	234,643	
211 tugs and smacks.....	88,195	
532 dories.....	6,308	
		569,577
Total value of fishing capital invested.....		3,278,623

Number of persons employed in the fisheries of Nova Scotia, 1900.

Men in fishing vessels .....	5,816
" boats .....	19,396
Persons employed in lobster canneries.....	6,447
Total.....	31,659

## APPENDIX No. 4.

## NEW BRUNSWICK.

District No. 1, comprising the county of Charlotte.—*Inspector J. H. Pratt, St. Andrews.*

District No. 2, comprising the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert.—*Inspector R. A. Chapman, Moncton.*

District No. 3, comprising the counties of St. John, King's, Queen's, Sunbury, York, Carleton and Victoria.—*Inspector H. S. Miles, Oromocto.*

## District No. 1.

REPORT ON THE FISHERIES OF DISTRICT No. 1, NEW BRUNSWICK,  
COMPRISING THE COUNTY OF CHARLOTTE, FOR THE YEAR  
1900, BY INSPECTOR JOHN H. PRATT.

ST. ANDREWS, N.B., December 31, 1900.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit herewith my twelfth annual report, on the fisheries of District No. 1, New Brunswick, which comprises the county of Charlotte, and the Chiputneticook Lakes, forming a portion of the boundary line between New Brunswick and the adjoining State of Maine. I also inclose tabulated statements showing the value and catch of fish in the several sub-districts, together with a synopsis of the officers' reports, which you will find contain many very interesting facts, concerning the sea and inland fisheries. In order to better understand the fluctuations of the catches of this district more clearly, I think it advisable to insert here their values for the past ten years :—

Total for		Total for	
1891.....	\$1,279,977	1896.....	\$1,108,701
1892.....	863,465	1897.....	870,287
1893.....	771,182	1898.....	1,145,361
1894.....	1,118,477	1899.....	1,216,394
1895.....	968,203	1900.....	638,890

It is a source of regret for me to report such a decrease in the catch and value for the past season, so perceptible in the accompanying returns. While some branches of the fishing industries were fairly successful, the principal industry of the Bay of Fundy, the herring fishery, yielded very poor returns throughout the entire season. For instance, take the fisheries of the island of Grand Manan, for some unaccountable reason, not at present apparent, the value of the island's total catch this past year was but \$167,689, while the value of the previous catch for the season of 1899 was over half a million dollars, an immense decrease for one district alone, and nearly all in the herring fishery. Then notice the catch in St. Andrews Bay, with a decrease of nearly \$100,000, all owing to a decline in the herring catch.

## SESSIONAL PAPER No. 22

The usual ingenious theories have been advanced to account for this decrease in catch, and one of the prevailing ideas, which finds general acceptance among numerous intelligent fishermen, holds that dynamiting for pollock at Grand Manan is wholly responsible for the diminished schools of herring playing in shore during the past season. However, strange to say, the fishermen in this district do not by any means feel despondent over the poor returns, but feel certain that the coming season of 1901 will amply compensate them for the shortage of the past season. It has been noticed by the experienced fishermen, and it is generally believed to be correct, that a poor season is invariably followed by one of the opposite nature, and it is very much to be hoped that our fishermen will not be disappointed in their belief. One of the signs that fishermen believe in the foregoing is to be noticed in the increased number of applications for new sardine herring weirs to be erected during the coming season, although the number of weir licenses issued in the season just closed exceeded that of any previous season. Although I spent considerable time this past year on the Nova Scotia and Cape Breton coasts, endeavouring to prevent the United States mackerel schooners from poaching within our territorial waters, still, I was enabled to give satisfactory attention to the enforcement of the various laws governing the fisheries of this district.

Some poaching was attempted on the Grand Manan spawning grounds during the annual close season there, but, owing to the energetic movements of the local officer, the poachers operations were very quickly frustrated. The energy displayed by the numerous sardine factories in the adjoining State of Maine, in order to secure small herring for the operation of their factories, assisted our weir owners very much from a financial standpoint, especially the weir owners who had not entered into any contract to sell their catch at the regulation price of \$4 per hoghead. The Eastport Syndicate factories and the numerous factories opposed to the syndicate, competed merrily at times when small herring were scarce, and our weir owners, who were reaping the benefit, enjoyed this competition hugely. One morning at a weir in the Magaguadavic River, I was a witness to as much as \$22.75 per hoghead being paid for the catch of one of the weirs located there. These fancy prices, I regret to say, are not paid very often.

An increase of over \$50,000 will be noticed in the value of fishery material used, which was rendered necessary by the increased number of new weirs erected this season, and the seines, boats, &c., required to operate each weir.

## HERRING.

This fishery is the leading industry in my district and attracts the attention of nearly all the fishermen for their annual income and support. The failure of the other branches of the fisheries in this district would only cause a slight ripple of disappointment, but the failure of herring to strike inshore causes a blow to be delivered that shakes every portion of the district. The herring failure this year has been discussed in all its various bearings, but, as usual, without any satisfactory solution of the causes of their appearance in such diminished numbers. A large element of doubt must always remain with reference to the causes that lead to the movements of fish life, but the discussion of those causes will always yield ample opportunities for the interchange of opinions. The fishermen feel that after a life-long study of the herring question in the Bay of Fundy, that these fish will manage to preserve themselves notwithstanding the terrible slaughter being made on them to satisfy the demands of the human race. It is sincerely to be hoped that they are correct in their conclusions on this subject. Should sardine herring strike in through this coming season, it promises to be of great benefit to our weir owners. Quite a number of new sardine factories have been erected in the State of Maine in opposition to the sardine syndicate at present controlling the sardine supply, and they will endeavour by every means in their power to break down the controlling power of the syndicate. This competition to procure the raw material will naturally benefit our weir holders, and although it may mean the extinction of some of the contending factories, it will be the exact opposite for our fishermen, and we fervently trust that this competition may not terminate for many years.



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I presume that the figures of the sardine industry in the State of Maine for the past year showing number of cases packed, values, &c., would be of interest. Nearly all our sardine herring are exported to this state for manufacture and are given in their official reports as the product of American fisheries. Eight hundred and fifteen thousand and sixty cases of sardines were packed during the year, averaging 100 cans to each case, having a value of \$2,932,434. This pack and value is considerably less than that of 1899. There are seventy-nine of those sardine canning factories in the State of Maine, giving employment to nearly 8,000 employees, and distributing among this number wages aggregating nearly \$800,000.

## POLLOCK.

The methods employed by many avaricious fishermen this year on the pollock grounds at Grand Manan have been the subject of much sharp and bitter criticism all through the maritime provinces. I refer to the killing of them by exploding dynamite cartridges in their midst, by which means, no doubt, half of the fish are lost to the fishermen by their not coming to the surface after the explosion. A law should be enacted prohibiting the landing of fish killed by dynamite, and also the fitting out of boats for this unpopular method of fishing. It is the unanimous desire that this dynamiting should be stamped out completely, and it seems that a law as outlined above would be effective. Notwithstanding the large number of quintals taken by the employment of this nefarious method of dynamiting the schools, and the catch also by the old-time methods employed by law-abiding class of fishermen, a decrease of about 4,000 quintals will be noticed in the returns when compared with the returns for last season.

## SALMON.

A considerable increase may be noticed in the catch of salmon, the past season being an exceptionally good one for the anglers, especially those fishing in the waters of the St. Croix River, where your departments efforts in retaining the services of the two guardians for such a lengthy period each season, is meeting with the success it merits. Good signs of salmon ascending through the fish-ways at St. George are quite in evidence each season now, and there is no doubt, with the exercise of constant vigilance this river will become stocked with this most toothsome fish.

## LOBSTERS.

A decrease of nearly 3,000 cwt. is to be noticed, I regret to say, in the lobster catch, and the pack of the canned article by the several factories, will also show a decrease. Poor fishing was reported by the majority of those engaged in the fishery, although the same amount of gear was used as in previous seasons. It seems to be beyond question that more restrictive measures will have to be adopted, in order that this fishery will be kept from becoming worthless to those prosecuting it. It is hoped by the vast majority of the fishermen in this district that your department will change the present size limit to ten and one-half inches.

## COD.

A decrease of over 1,500 quintals will be noticed in the catch of cod, due mainly to less men being engaged in this fishery, a large number of them having turned their attention to the weir fishery.



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## HADDOCK.

About \$7,000 will be noticed as the decrease in the value of this fishery, when compared with that of last year, although this falling off can not be attributed to any scarcity in the schools of this fish, but simply to a less vigorous prosecution of this fishery, by fewer men being engaged in it. During the month of December a number of men and vessels were employed in this fishery in the channel between Grand Manan and Campobello, and by the well deserved success they met with it was quite evident that this and other line fish had not deserted our shores, as some persons would have us believe.

## CAMPOBELLO'S FISHERIES ASSOCIATION.

The annual exhibition and aquatic sports of this society were held at Welshpool, Campobello, on October 18, and were full of interest to the large number of people who were so fortunate as to be present. I had the honour of being appointed as one of the judges for the sailing regatta and the races were started from the stern of the *Curlew* by the starting gun on board. It was a pleasure to be ordered there and the association officers treated me, as an official representative, with the greatest courtesy. In one of the buildings the numerous exhibits of fish were laid in a most inviting manner before the public gaze, and won well deserved approbation. Handsome money prizes were awarded to the successful competitors. It was a revelation to the attending strangers, to see the handsome sloop rigged boats that competed in the principal boat race. Outsiders generally have but a faint idea of the excellent vessels used by the fishermen in Passamaquoddy waters. The annual dinner of the society took place in the evening at the Owen Hotel, followed by the annual ball, which was very largely attended by the representative people of the county and of the neighbouring states.

## SYNOPSIS OF FISHERY OFFICERS' REPORTS.

*Guardian Hall of St. George*, who has control of the important fish-ways on the Magaguadavic River, states: that frost fish and alewives have been very abundant during the past year. Trout also have been plentiful and Lake Utopia was visited by sportsmen from many United States cities, all having effected good catches. More salmon were seen in the river than during any previous year, although none were taken. The fish-ways are all in good condition, except the one at upper falls, which needs looking after.

*Overseer Todd*, who has charge at St. Stephen of the important salmon fishery of the St. Croix River, says that the increase in the number of salmon ascending the river is plainly evident to the most ordinary observer. This owing wholly to the efficient protection given by the two night guardians there under his direction, who efficiently prevent illegal fishing on the Canadian side of the boundary line.

*Guardian McLaughlin*, who looks after the fisheries of Lake Utopia, and the other lakes in this vicinity, in his annual report states that trout have been very plentiful, and satisfactory catches have been made by the numerous sportsmen visiting the lakes and streams in the vicinity of St. George. Smelts, frost fish, and alewives, have been very plentiful in their season, and salmon have been very plentiful on the Pocologan River. They enter this river about August 20, and, no doubt, numbers of them are taken illegally. The river being quite a distance from here, he could not devote as much time in protecting it as he would like.

*Overseer Campbell, of St. Andrews*, states that he regrets that his returns show quite a decrease in the value and catch. There were twenty more weirs fishing than in 1899, and still the catch was not much more than half that of the previous year. Herring were plentiful but too small for sardines. He believes that this sardine industry is destroy

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ing the herring fishery. There have been no net herring for some years, but plenty of britt, and if, as Prof. Prince says, none of the herring canned in the State of Maine have ever spawned, it is only a question of time when the herring fishery will be done. There has been some line fishing, but not as good as in 1898 and 1899. The lobster fishing is about done, which is attributed to taking lobsters smaller than 10½ inches, and also fishing for them during the winter.

There was considerable illegal fishing during the season, both torching and seining which can only be stopped by having a force on the grounds at all times. The lobster catch in the bay which fifteen years ago amounted to 600 tons, is now only about ten which is ascribed to winter fishing.

*Overseer Lord*, who has control of the fisheries of West Isles, states that britt, and undersized herring were very plentiful this season, but gave no value to the fishermen. Herring suitable for sardine herring show a decrease both in quantity and value. They seem to be getting scarcer each year, and a number of weirs not catching enough to pay for expenses of repairing. Some think as their was so many britts there will be plenty of herring next year, but the fish are becoming scarcer each year. There was no herring smoked in this district last year. The lobster catch in this division will show a decrease, which is probably to be attributed to the large number of men being engaged in it.

*Guardian McLean*, who controls the district from L'Etang to the Magaguadavic River, states that the catch of line fish for the year has been about the same as last year, with prices about the same. The lobster fishing was good, more men and more traps were employed at it. Pollock, hake and cod fishing have been good, but the prices have not been as good as formerly, which I think, is due to the fact of the Porto Rico markets being in the hands of the United States government. There was a large school of sardine herring as in former years, but rather too small for sardine purposes, but only about half a catch was made when compared with previous years. An increase was made in the pack in the sardine factory located in this district, over 8,000 cases being put up.

*Guardian Cross*, located at Beaver Harbour, states that on the whole the fishermen have not done as well as last year, and cannot account for the fact of herring becoming scarcer each year, and believes it must be owing to so many small ones being taken from the weirs for lobster bait. Quite a trade in clams and dulse is being developed in his district, and many also are engaged in dragging for scallops, which are canned.

He thinks it would be a good idea to have a close season for clams and scallops, to save them from extinction. The lobster catch fell off this year and there is not the slightest doubt they are becoming scarcer. Line fishing fell off this year, owing to the difficulty in securing bait at times, and also to the fact that there were not so many men engaged in it, but he believes the fish were just as plentiful as ever. Pollock in large numbers were very often found in the weirs. No large herring have been taken of late years, only what have been caught at the Wolves, and there is no doubt the taking of small herring is injuring the catch of the large. Clams have increased, and more of them have been handled than in previous years, and he can also say the same of scallops.

*Overseer Fraser, of Grand Manan*, returns only about half a catch of fish of all kinds in comparison with that of the previous year, but with reference to the herring catch it was considerably less than half of that taken in 1899. He cannot give any correct cause for this decrease, but it is a well known fact that each kind of fish is becoming scarcer year by year. The line fishermen complain that the dynamiting seriously injures their fishing, and they give as a reason that when a charge has been exploded anywhere within their vicinity, they would be unable to hook any more fish. There is no doubt this killing of fish by dynamite is very injurious to the fisheries, and if this slaughter is allowed to continue the results will be ruinous. If a law is not enacted preventing this harmful method from continuing, a greater number will provide themselves with a dynamite outfit. He suggests that vessels be prohibited from carrying this outfit, as the best means to break up the practice.



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A large decrease in the catch of pollock will be noticed for the reason that none were taken in the weirs as in previous years. The price received for them was somewhat higher. The prices quoted for fish of each kind, are, with very few exceptions, the same as last year. A gratifying advance was noticed in the prices paid for boxes of bloaters, which advanced from 60 to 90 cents per box. This officer suggests the enactment of a law requiring all nets to be taken from the water at sunrise and not set again till sunset. He also suggests a more stringent protection of the spawn fish during the close season. The placing of some restriction on the taking of britt by the weirs, which was carried on the past season to a ruinous extent, is absolutely necessary. Large quantities of those small fish were taken and sold for lobster bait, and it required from fifteen to twenty-five of them, by actual count, to balance in weight one mature herring. A number of the weirs, principally a few in Seal Cove, made very good hauls of herring suitable for smoking which were sold in Lubec and Eastport, more being realized there than the people of the island would pay. The close seasons were not properly observed, though he did all in his power to enforce same.

*Overseer Savage, of Campobello*, in his report for the year states, that pollock made their appearance early in June in large schools and the catch was much larger than that of last year. Although very few were caught in weirs, the price paid was fair. Line fish of the different kinds, yielded an average catch, with prices ruling somewhat lower than the previous year. The catch of lobsters will show an increase, owing partly to their being more numerous on the ground and to the fact of unusually good weather prevailing during the spring months. Good prices were paid for canning purposes and also for shipment in a fresh state. Herring were scarcer than previous year. There was a large run of very small herring during the summer months, but they were too small to be of any commercial value. Large herring of the size caught in gill-nets were almost a failure. He attributes to a very large extent the scarcity of fish this season, was almost entirely owing to the dynamite pollock fishing at Grand Manan, which was carried on outside the three mile limit, but perhaps in foggy weather, closer in shore. Fishermen differ in their opinions regarding the scarcity of some kinds of fish, but, no doubt, the great amount of fishing done both off shore and inshore tends to make all kinds of fish scarce. He believes that the fishery regulations have been as well observed as usual.

*Guardian Conrad, of St. Croix*, who patrols the Chiputneticook lakes, running between New Brunswick and the State of Maine, in his report states that he met with considerable difficulty in endeavouring to enforce the fishery regulations on those lakes. There is a determined class of poachers who reside on the American side, who will embrace every opportunity to set their nets on the Canadian side, where the fishing is very much superior to that on the United States side. The different kinds of fish found in the lakes, black bass, white perch and pickerel, are still quite plentiful, and a good angler, under good conditions, can easily hook 200 lbs. per day.

*Chief Boatman, Silas Mitchell*, patrolling the fishing grounds in Quoddy River, opposite Eastport, reports that very little trouble was experienced in keeping the American fishermen from poaching on the Canadian side of the boundary line, as they are becoming better acquainted with the fact that the Canadian fishery laws will be strictly enforced against them. Pollock made their appearance on the fishing grounds in the Quoddy River about the middle of May and lasting till about the middle of September. The catch was good during this time and the total for the season was quite large. The catches of haddock, cod and hake, in the 'North Channel' that is, between Grand Manan and Campobello, during the month of December, have been exceedingly good.

I have the honour to be sir,  
Your obedient servant,

JOHN H. PRATT,  
*Inspector of Fisheries.*

## DISTRICT No. 2.

REPORT ON THE FISHERIES OF DISTRICT No. 2, NEW BRUNSWICK,  
 COMPRISING THE COUNTIES OF RESTIGOUCHE, GLOUCESTER,  
 NORTHUMBERLAND, KENT, WESTMORLAND AND  
 ALBERT, FOR THE YEAR 1900, BY INSPECTOR  
 R. A. CHAPMAN, MONCTON.

MONCTON, N. B., Jan. 2, 1901.

To the Dominion Commissioner of Fisheries,  
 Ottawa.

SIR,—I have the honour to submit my report of the fisheries in District No. 2, of the province of New Brunswick, consisting of the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert, for the year 1900, with tabulated statement, giving the products and values by districts and counties, together with an estimate of the capital employed in the prosecution of these fisheries.

The returns referred to show an increase in the aggregate value of fish taken over that of 1899 of \$204,280, the values for the two years being:

For 1899.....	\$2,595,024
“ 1900.....	2,799,304

which is somewhat better than I expected when I wrote my preliminary report, and with the high prices prevailing for fish of all kinds it has certainly been a good year for all concerned in the business. I would now beg briefly to refer to the several leading kinds of fish caught.

## SALMON.

The catch is a little larger than last year and fly fishing was reported good on all the streams, showing that the spring run of fish had succeeded in ascending in large numbers, the spawning grounds were also well stocked with parent fish last fall, which is regarded as favourable for coming seasons.

## SHAD.

The catch has been very small in the Bay of Fundy, and no better can be expected until these fine fish are protected during their spawning season, which I have referred to so often.

## HERRING

Were, as every year, abundant in the spring and the usual large quantities taken. Parties from Charlotte County have and are erecting smoke-houses and curing considerable quantities of them. This business is open to unlimited possibilities. The fall herring, on the banks between Caraquet and Miscou, were unusually plentiful the past season, and large quantities of fine fish taken which were sold at good prices.



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## MACKEREL.

Nearly three times as many of these fish were caught as in 1899, they being very plentiful on many parts of our coasts early in the season, and some immense catches were made. Tinkers or small fish having swarmed along our shores for the past few years and should lead to good fishing for some time to come.

## ALEWIVES,

As usual, were in large numbers in several of our rivers last spring and might have been taken in large quantities, but little attention appears to be given to this fishery.

## COD.

The catch slightly exceeds that of last year and would have been much larger only for the storm in September, referred to in my preliminary report, when so many vessels and lives were lost. Prices were good, and it has been a profitable year for those engaged in this very important fishery.

## BASS.

The quantity taken is again falling off, and another close time on the Miramichi River may be necessary to restore this fishery again. At any rate, hook and line fishing should be prohibited during the spawning season, as these fish mature slowly.

## TROUT.

Both sea and lake trout are caught in many different places in considerable quantities. A number of clubs are formed who lease the streams and lakes and give some protection thereto. The catch appears to be increasing.

## SMELTS.

The quantity of smelts taken is upwards of 800,000 pounds more than in 1899, which was previously the largest on record. The importance of this fishery can hardly be overestimated, and it is now proved conclusively that there is no danger of overfishing. Many years ago, before they had a commercial value, large quantities were taken in the spring for manure, &c., and this when they had come into the rivers to spawn. This, of course, now is all stopped. The present winter the weather from the first has been extremely favourable, and such large quantities have been caught that prices have gone down, and there is no talk of extension of the season as heretofore. The totals for 1901 will, consequently, be still larger than for 1900.

## LOBSTERS.

With more factories and gear of all kinds the pack is considerably below that of last year. The high prices prevailing is stimulating this fishery, I am sure, beyond what it reasonably can bear, and it is hard to tell what is best to be done to prevent its gradual extermination. Fall fishing, I believe, would do it, as this would give all the female fish a chance to spawn. But those interested will not agree to this change for

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several reasons, prominent among which is the stormy weather prevailing during that season of the year. If hatcheries were established at different points along our coasts, they would, no doubt, be of great help, and this might save what is of such vast importance, as this fishery capitalized at four per cent is worth, in my district, about \$10,000,000.

## OYSTERS

Show a somewhat larger catch than in 1899, due partly to the opening of the reserve in Shediac and partly to the high prices prevailing, which stimulated those engaged in this industry to greater exertions. In my report of 1898, I referred to the necessity of an examination of the Caraquet beds, which do not produce at all what they did years ago, and which, I believe, are becoming covered with mud and sediment. This could probably be overcome by dredging. At any rate, a close examination by the oyster expert, Mr. Kemp, would be worth making.

I have reports from only three or four of the local officers, and these contain no matter not covered by my own report.

I have the honour to be, sir, your obedient servant,

R. A. CHAPMAN,  
*Inspector.*

## DISTRICT No. 3.

REPORT OF THE FISHERIES OF DISTRICT No. 3, OF NEW BRUNSWICK, COMPRISING THE COUNTIES OF ST. JOHN, KING'S, QUEEN'S, SUNBURY, YORK, CARLETON AND VICTORIA, FOR THE YEAR 1900, BY H. S. MILES, INSPECTOR.

OROMCTO, January 1, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit my report on the fisheries of District No. 3, New Brunswick, for 1900, also statistical returns showing the quantities of fish taken and their value, which, when compared with that of the preceding year, shows an increase, as follows :

St. John County, 1899 .. . . .	\$238,635 75
“ “ 1900 .. . . .	258,464 75
Increase .. . . .	\$19,829 00
River Counties, 1899 .. . . .	\$69,971 50
“ “ 1900 .. . . .	73,083 00
Increase .. . . .	\$3,111 50

## SESSIONAL PAPER No. 22

## SYNOPSIS OF FISHERY OFFICERS' REPORTS.

*Overseer O'Brien, of St. John County*, in his annual report, states that the season just closed was a successful one for the fishermen. Early in the season alewives were scarce, but on May 15, they struck in and were taken in great quantities for two weeks by both weir and net fishermen.

## SHAD

Shows a smaller catch than usual, resulting from over fishing, which might be in part prevented by prohibiting their being taken when returning from the spawning beds, as they are then unfit for use.

## SALMON.

There were less salmon than usual taken by the boat fishermen in the bay, but in the weirs along the south shore the catch was particularly good. Grilse were more numerous than for twenty years. Trawling for cod, hake and haddock was good, and the ready market made the fishermen feel happy.

The catch of lobsters was a little short on account of the regulation measurement of not less than 10½ inches being enforced. The Fry Island weirs did not go into the Eastport syndicate and kept the price of herring up, otherwise they would not be worth catching. The young herring were used for lobster bait and sardines. A considerable quantity of eels were taken and shipped fresh in ice to the States, where a fair price was obtained, but generally speaking this industry is only a one man business. The greatest difficulty is experienced in enforcing the Sunday close time, and for violations ten parties were fined.

*H. S. Parlee, guardian at Studholm, King's County*, reports a careful observance of the fishery laws and regulations in his district.

*M. G. Jenkins, guardian at Kars, King's County*, reports that the fisheries carried on in his district have been strictly according to law; he has not heard one complaint from any one in his district.

*R. C. Foster, guardian, Upperton, King's County*, reports a careful enforcement of the regulations preventing the escape of sawdust into the various rivers and streams in his district. No illegal fishing was permitted.

*Jonah Keith, guardian, Havelock, King's County*, reports a large run of shad in Canaan River last spring. Law well observed in his district.

*Michael Brown, guardian, Westfield, King's County*, reports a successful salmon and shad fishing season, also a careful observance of the regulations.

*W. U. S. Gamblium, guardian, Pearsonville, King's County*, says he had much difficulty in a proper or satisfactory enforcement of the sawdust regulations. The angling for trout was good and sportsmen were many.

*Overseer I. J. Hetherington, of Queen's County*, reports the catch of salmon much above the general average. Shad too was vigorously fished throughout the season, and although there were no heavy runs at one time, yet industry had its reward, and a good yield was obtained. Alewives were abundant, but less than usual were taken on account of the high wages paid for less disagreeable work. Other fish, including lake herring, trout, pickerel and eel were about as usual. It seems that the fishermen now realize that the strict observance of the laws are to their advantage, so no seizures or fines were necessary for their enforcement. The usual number of guardians were employed this season.

*Overseer Cecil F. McLean, of Sunbury County*, reports an increase in the catch of alewives, shad and pickerel over any former year. Salmon also were more plentiful than for some time past, but, owing to the high water, less were taken. He thinks an efficient fish-way should be put in the dam at Hartts Mills, above which are excellent spawning grounds in North Oromocto Lake.



1-2 EDWARD VII., A. 1902

*Guardian C. H. Turney, of Burton, Sunbury County*, reports two violations, which were satisfactorily settled.

*Overseer Robert Orr, of York County*, reports that he devoted all his time to the fisheries on the St. John River and South-west Miramichi, also north branch of South-west Miramichi in Carleton County. He found great difficulty in preventing poaching of all kinds, but thinks with the assistance of the six guardians given him, a fair protection was afforded on the Miramichi River. In the St. John River, the constant run of logs prevent the setting of nets above tidal waters until late in June, after which a careful lookout has to be maintained. During the heavy freshet in September, a great run of salmon successfully made their way to the spawning grounds on the Tobique.

*Guardian McEwen, Upper Miramichi, in Carleton County*, says that salmon were more plentiful on the spawning beds than they had been for the last ten years. On the night of October 20, the river froze hard enough to carry a horse, and so afforded protection to the salmon on the bars and cut short the work of the guardians. The inspector made two trips over river this season, spending in all about ten days on river.

*Carleton County* (note by Inspector), I have no overseer in this county. The usual number of guardians were in service on St. John River and Miramichi, no complaints were made by guardians and the laws were well observed.

*Overseer Leonard Wilson, Victoria County*, reports plenty salmon and says that the guardians should be appointed not later than May 15, otherwise net fishing will be done.

*Overseer Hector Nadeau, for the Madawaska district*, reports as follows:—It is impossible for me to compare accurately the catch of the last year with that of previous years, as I have no figures to go by, this being my first year as an overseer. Judging, however, from surrounding circumstances, I infer that the amount received from this business by the population of this county, must be getting smaller every year. This is likely a result of saw-mills being allowed to dump sawdust and mill refuse into the different streams, but principally into the St. John River. Ten years ago trout and whitefish in quite large quantities could be taken out of the waters of the St. John, anywhere between Grand Falls and the St. Francis River, but to-day a fisherman returning home after a few hours' fishing must consider himself lucky if one or two fishes (small at that) adorn the inside of his basket. Grand River, in the parish of St. Leonard's, is not now the fisherman's paradise it used to be. This, I think, is principally due to the all-summer drives which have taken place on that stream for the last twenty years.

Green River is fished to excess, and as it is one of the many streams in this county which has no special guardians, our friends from across the international boundary and a few of our own people are in the habit, I am told, of using explosives and other illegal means of fishing. This stream should be protected.

Madawaska River is well looked after on the New Brunswick side of the line, but on the Quebec side, I have been told by eye witnesses that some nights this autumn as many as twenty lights could be seen on the river at the same time. Another guardian should be appointed to look after that part of the river, as the present one has, I understand, no time to give it his attention.

Baker Brook has no fish now to speak of, but the lakes (which are in the province of Quebec) that empty into it, used to be full of trout, whitefish, toque, &c., but they are now fast losing their finny population for about the same reasons as given *re* Green River. Baker Brook and those lakes should be guarded. The catch at Baker Lake seems to be getting smaller every year. There was only one fine collected this year from a gentleman from Fort Kent, Maine. This fine was for \$20, and made poachers give Baker lake a wide berth this year. There are no fish-ways on any of the dams in this county, and I do not think they are needed.

I have the honour to be, sir, your obedient servant,

H. S. MILES,  
*Inspector.*



## SESSIONAL PAPER No. 22

## NEW BRUNSWICK—District No. 1.

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fishing Materials, &c., in the County of Charlotte, Province of New Brunswick, for the Year 1900.

Number.	DISTRICTS.										FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
											Vessels.			Boats.			Gill Nets.			Seines.			Trawls.		Weirs.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
											Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.														FISH PRODUCTS.			Seal skins, No.	Total VALUE OF ALL FISH.	Number.
	Hallibut, lbs.	Trout, lbs.	Dulce, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Cod, fresh or frozen, lbs.	Pickarel, lbs.	Herring, kippered, cans, No.	Sardines, brls.	Sardines, preserved, cans.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			
<i>Charlotte County.</i>																				
1 St. Stephen and vicinity	6000	24500	7000	200	5000	73200	16795	1000000	4900	500	20	4000	3425	400	5	2,235 00	1			
2 Lepreau to L'Etang.								30945	800000				600			145,857 30	2			
3 L'Etang to St. George.								36365	10000	5000			100	1000	2000	117,220 00	3			
4 St. George to St. Stephen.	6000	75000	2000	10000	155000								11500	3300		95,162 50	4			
5 Grand Manan	20000		600	65000			3436					123				167,689 00	5			
6 Campbell.			750				10000									58,422 60	6			
7 West Isles.	6000		3000	50												50,704 25	7			
8 St. George and vicinity																1,600 00	8			
Totals.	20000	18000	99500	13350	250	750 00	5000	228200	97541	1810000	11900	3500	123	20	25060	9793	2580	5	638,890 65	

## RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 1, Province of New Brunswick,  
for the Year 1900.

Kinds of Fish.		Quantity.	Price.	Value.
			\$ cts.	\$ cts.
Salmon, fresh in ice.....	Lbs.	3,850	0 20	770 00
Scallops, preserved.....	Cans	28,800	0 15	4,320 00
" fresh.....	Lbs.	2,500	0 15	375 00
Herring, pickled.....	Brls.	3,386	4 00	13,544 00
" fresh or frozen.....	Lbs.	3,262,500	0 01	32,625 00
" smoked.....	"	2,167,000	0 02	43,340 00
" kippered.....	Cans	228,200	0 10	22,820 00
Sardines, fresh.....	Brls.	97,541	2 00	195,082 00
" preserved.....	Cans	1,810,000	0 05	90,500 00
Lobsters, canned.....	Lbs.	99,552	0 20	19,910 40
" fresh.....	Cwt.	9,539	5 00	47,695 00
Cod, dried.....	"	3,309	4 00	13,236 00
" fresh or frozen.....	Lbs.	75,000	0 04	3,000 00
Clams in shell.....	Brls.	3,571	1 00	3,571 00
" shelled.....	"	1,084	7 00	7,588 00
" preserved.....	Cans	60,520	0 10	6,052 00
Haddock, fresh.....	Lbs.	571,900	0 03	17,157 00
" dried.....	Cwt.	1,063	3 00	3,189 00
Finnan haddies, smoked.....	Lbs.	83,000	0 06	4,980 00
" " canned.....	Cans	3,600	0 10	360 00
Hake, dried.....	Cwt.	12,005	2 25	27,011 25
" sounds.....	Lbs.	13,252	0 50	6,626 00
Pollock, dried.....	Cwt.	18,884	2 00	37,768 00
Halibut, fresh.....	Lbs.	20,000	0 10	2,000 00
Trout, fresh.....	"	18,000	0 10	1,800 00
Smelts, fresh.....	"	13,350	0 05	667 50
Alewives, pickled.....	Brls.	250	4 00	1,000 00
Pickarel, fresh.....	Lbs.	5,000	0 05	250 00
Flounders, fresh.....	"	11,900	0 05	595 00
Tom cod and frost fish.....	"	3,500	0 05	175 00
Squid.....	Brls.	129	4 00	516 00
Coarse and mixed fish.....	"	20	2 00	40 00
Fish oil.....	Gall.	25,060	0 30	7,518 00
Fish used as bait.....	Brls.	9,793	1 50	14,689 50
" " manure.....	"	2,580	0 50	1,290 00
Mackerel, preserved.....	Cans.	2,000	12 00	240 00
" fresh.....	Lbs.	5,000	12 00	600 00
Seal skins.....	No.	5	4 00	20 00
Dulse.....	Lbs.	99,500	0 06	5,970 00
Total value of catch for 1900 .....				638,890 65
" " " 1899.....				1,216,259 95
Decrease during 1900.....				577,369 30



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## RECAPITULATION

SHOWING the Number and Value of Vessels, Boats, Nets, Weirs, &c., engaged in the Fisheries of District No. 1, **New Brunswick**, for the Year 1900.

Number.	Material.	Values.
		\$ cts.
76	Fishing vessels (tonnage 1,330).....	35,850 00
1,233	" boats.....	78,537 00
773	Gill nets, (21,620 fathoms).....	7,749 00
394	Weir seines, (12,181 fathoms).....	26,415 00
623	Trawls.....	5,964 00
392	Weirs.....	165,710 00
26	Smelt nets.....	252 00
1,542	Hand lines.....	1,085 00
12	Lobster canneries.....	29,000 00
19,461	" traps.....	16,610 00
8	Freezers and ice houses.....	5,650 00
755	Smoke and fish houses.....	140,460 00
227	Piers and wharfs.....	38,740 00
24	Tugs and smacks.....	12,300 00
5	Sardine factories.....	41,000 00
2	Clam canneries.....	600 00
4	Kippered herring factories.....	10,000 00
1	Fish guano factory.....	5,000 00
6	Fish curing ".....	3,000 00
70	Weirs scows.....	4,000 00
70	Pile drivers.....	5,500 00
40	Fish presses.....	3,000 00
	Total value of material.....	\$ 636,422 00

## NEW BRUNSWICK—District No. 2.

RETURN Showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., in the District No. 2, Province to **New Brunswick**, for the Year 1900.

DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.					
	Vessels.			Boats.			Gill Nets.			Smelt Nets.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.
<i>Restigouche County.</i>												
1 Above Dalhousie . . . . .	1	28	500	5	35	700	50	37	7700	6500	170	8500
2 Below Dalhousie . . . . .					195	4000	300	130	18600	20000	24	1650
Totals . . . . .	1	28	500	5	230	4700	350	167	26300	26500	194	10150
<i>Gloucester County.</i>												
1 Beresford, and part of Bathurst . . . . .	121	1385	48000	400	425	9800	860	1660	61000	42000	51	2500
2 Caraquet, New Bandon and part of Bathurst . . . . .	22	240	9500	90	540	16000	900	1900	65000	38000	175	5500
3 Saumarez, Inkerman and Shippegan Mainland . . . . .	62	750	33000	230	450	19000	490	2850	84500	32500	38	1400
4 Shippegan and Miscou Islands . . . . .	205	2375	90500	720	1755	51000	3100	6990	238500	122000	264	9400
Totals . . . . .												
<i>Northumberland County.</i>												
1 Neguac, &c. . . . .	4	49	1850	16	200	7000	300	800	50000	45000	220	19800
2 Bay du Vin, &c. . . . .	3	50	1200	10	210	8000	500	800	80000	70000	250	10000
3 Chatham, &c. . . . .					150	4000	130	220	40000	35000	400	28000
4 South-west and North-west Miramichi Rivers . . . . .					110	1500	110	300	13000	7000	870	57800
Totals . . . . .	7	99	3050	26	670	20500	1060	2120	183000	157000	870	57800



RETURN showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.																		
	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	LoBSTERS, preserved in cans, lbs.	LoBSTERS, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Halibut, lbs.	Trout, lbs.	Number.	
<i>Restigouche County.</i>	50500	.....	.....	1550	30000	.....	.....	.....	22600	140	140	.....	.....	.....	.....	.....	.....	7000	1
	147000	.....	.....	.....	.....	.....	.....	.....	.....	95	140	.....	.....	.....	.....	.....	.....	6000	2
	Totals.....	157500	.....	1550	30000	.....	.....	.....	22600	235	140	.....	.....	.....	.....	.....	.....	13000	
<i>Gloucester County.</i>	74500	300	500	15400	50000	30000	2000	20	17520	120	2500	80	.....	.....	.....	1000	7000	1	
	216500	.....	.....	40000	50000	.....	15000	10	182000	200	43270	2200	.....	.....	.....	30000	12000	2	
	35000	.....	.....	9000	51000	.....	14000	10	82500	185	9000	30	.....	.....	.....	11000	8000	3	
	.....	10000	.....	10000	40000	.....	15000	40	336000	150	21500	50	.....	.....	.....	2500	20000	4	
	Totals.....	10300	500	74400	191000	30000	40000	80	618020	655	76270	100	.....	.....	4700	8200	62000	28000	
<i>Northumberland County.</i>	85500	.....	.....	5000	13000	2000	2000	30	43600	120	2000	.....	.....	.....	.....	1500	6000	1	
	92000	.....	.....	3000	10000	.....	300000	100	50000	150	200	.....	150	200	.....	2000	2000	2	
	96000	.....	.....	25	.....	.....	1000	.....	.....	.....	150	.....	.....	.....	.....	.....	5000	3	
	86000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17000	4	
	Totals.....	359500	.....	8025	23000	2000	303000	130	93600	270	2350	.....	150	300	.....	3500	30000		



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<i>Kent County.</i>																		
1	Richibucto, St. Louis, &c.	29600	300	600	15650	30000	.....	392000	190	204600	260	1640	181200	3000	3360	5600	13200	1
2	Buctouche, &c.	.....	.....	.....	12000	20000	.....	10000	500	145000	140	100	.....	1200	1800	.....	3200	2
3	Cocagne, &c.	.....	.....	.....	6000	10000	.....	5000	300	69000	50	100	.....	160	.....	.....	2100	3
Totals.		29600	300	600	33650	60000	.....	407000	990	418600	450	1840	181200	4360	5160	5600	18500	
<i>Westmorland County.</i>																		
1	Shediac, Moncton and Salisbury	2200	.....	.....	4000	50000	10000	20000	200	245520	300	40	.....	20	.....	.....	10000	1
2	Botsford	.....	.....	.....	18000	100000	200000	2000	20	536000	1200	50	.....	.....	.....	.....	2500	2
3	Sackville and Westmorland	.....	.....	.....	1000	4000	4000000	1000	10	4800	1000	.....	.....	.....	.....	.....	2000	3
4	Dorchester	3000	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2000	4
Totals		5200	.....	.....	59100	154000	4210000	23000	230	786320	2500	90	.....	20	.....	.....	16500	
<i>Albert County in all</i>																		
1	.....	3000	.....	.....	200	3000	.....	.....	..	.....	.....	100	.....	.....	.....	.....	8000	1
Grand totals.		920800	10600	1100	176925	461000	4242000	779000	1430	1939140	4110	80790	1781350	9380	13360	71100	114000	

## RETURN showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.												FISH PRODUCTS.				TOTAL VALUE OF ALL FISH.	Number.
	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Bas, lbs.	Clams, brls.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, number.			
<i>Restigouche County.</i>																		
1 Above Dalhousie.....		456700				45		30000	20000		80		10	20		37,470		
2 Below Dalhousie.....		125000				50		2000	2000			20	400	200		49,711		
Totals.....		581700				95		32000	22000		80	20	410	220		87,181		
<i>Gloucester County.</i>																		
1 Beresford and part of Bathurst.....		4000		1500	50	30		19000	5000	10	300	250	1200	15000	8	105,164		
2 Caraquet, New Bandon and part of Bathurst.....		480000		20000	1000	350	1050	20000	120000	400	1200	16000	8000	15000	12	495,245		
3 Saumarez, Inkerman and Shippegan Mainland.....	50	360000	1200	8000	4000	200	20	4000	10000	25	500	2200	2000	2000	24	148,685		
4 Shippegan and Miscou Islands.....		250000		8500	1000	100		4000	6000	20	500	7000	7000	6000	12	239,020		
Totals.....	50	1094000	1200	38000	6050	680	1070	47000	141000	455	2500	25450	18200	38000	56	988,114		
<i>Northumberland County.</i>																		
1 Neguac, &c.....	50	700000	100	40000	300	25	2000		41000			400	10000	1000		122,675		
2 Bay du Vin, &c.....	100	950000	200	10000	100	50	5000	10000	100000		300		5000	5000		167,950		
3 Chatham, &c.....	500	1700000	400	50000	50	25	3000	1200000	2000000				20	2000	*	193,500		
4 South-west and North-west Miramichi Rivers.....	1000		800	150000		300			2000							50,200		
Totals.....	1650	3350000	1500	250000	450	400	10000	10000	1343000		300	400	15020	8000		534,325		

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<i>Kent County.</i>									
	1	2	3						
1 Richibucto, St. Louis, &c.....	155	993000	1320	13300	140	210	1420	24000	115000
2 Buctouche, &c.....	.....	550000	400	1600	9000	140	3200	.....	125000
3 Cocagne, &c.....	.....	149000	200	1300	4000	100	1800	.....	60000
Totals.....	155	1692000	1920	22200	13140	450	6420	24000	300000
<i>Westmorland County.</i>									
1 Shediac, Moncton and Salisbury.....	.....	900000	500	4000	3000	200	1500	.....	15000
2 Botsford.....	.....	150000	120	2000	100	40	100	.....	10000
3 Sackville and Westmorland.....	500	80000	200	2000	50	35	150	1000	10000
4 Dorchester.....	1500	.....	.....	.....	.....	25	.....	.....	3000
Totals.....	2000	1130000	820	8000	3150	300	1750	1000	38000
<i>Albert County in all.</i>									
1.....	200	2000	.....	400	.....	40	.....	.....	30000
Grand totals.....	4055	7849700	5440	318600	22790	1985	19240	114000	1874000

\* Includes 60,000 cans of sardines.

1-2 EDWARD VII., A. 1902

## RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2, New Brunswick, for  
the Year 1900.

Kinds of Fish.	Quantity.	Price.		Value,
		\$	cts.	
Salmon, fresh..... Lbs.	920,800	0	20	184,160
" preserved in cans..... "	10,600	0	15	1,590
" smoked..... "	1,100	0	20	220
Herring, salted..... Brls.	176,925	4	00	707,700
" fresh..... Lbs.	461,000	0	01	4,610
" smoked..... "	4,242,000	0	02	84,840
Mackerel..... Brls.	1,430	15	00	21,450
" fresh..... Lbs.	779,000	0	12	93,480
Lobsters, preserved..... Cans.	1,989,140	0	20	387,828
" in shell..... Cwt.	4,110	5	00	20,550
Cod..... "	80,790	4	00	323,160
" tongues and sounds..... Brls.	178	10	00	1,780
Haddock..... Cwt.	1,350	3	00	4,050
Hake..... "	9,380	2	25	21,105
" sounds..... Lbs.	13,360	0	50	6,680
Halibut..... "	71,100	0	10	7,110
Trout..... "	114,000	0	10	11,400
Shad..... Brls.	4,055	10	00	40,550
Smelts..... Lbs.	7,849,700	0	05	392,485
Alewives..... Brls.	5,440	4	00	21,760
Bass..... Lbs.	318,600	0	10	31,860
Clams..... Brls.	22,790	2	00	45,580
Eels..... "	1,965	10	00	19,650
Sardines, preserved..... Cans.	60,000	0	05	3,000
Oysters..... Brls.	19,240	4	00	76,960
Flounders..... Lbs.	114,000	0	05	5,700
Frost-fish or tom-cod..... "	1,874,000	0	05	93,700
Squid..... Brls.	975	4	00	3,900
Coarse fish..... "	5,520	2	00	11,040
Fish oil..... Galls.	28,370	0	30	8,511
Fish as bait..... Brls.	75,630	1	50	113,445
Fish as manure..... "	98,720	0	50	49,360
Seal skins..... Pieces.	72	1	25	90
Totals, 1900.....				2,799,304
" 1899.....				2,595,024
Increase.....				204,280



SESSIONAL PAPER No. 22

## RECAPITULATION

Of the Number and Value of Vessels, Boats, Nets, Traps, &c., engaged in the Fisheries  
in **District No. 2, New Brunswick**, in the Year 1900.

Material.	Value.	Total.
	\$	\$
214 fishing vessels (2,522 tons) .....	94,550	
4,717 " boats .....	137,260	
712,800 fathoms gill nets .....	382,100	
2 mackerel trap nets .....	3,000	
280 trawls .....	1,300	
350 bass nets .....	1,850	
2,205 smelt nets .....	117,500	
5,020 hand lines .....	3,475	
		741,035
225 canneries .....	115,460	
217,400 lobster traps .....	196,100	
		311,560
213 freezers and ice houses .....	59,550	
473 fish and smoke houses .....	43,050	
53 piers and wharfs .....	19,150	
72 tugs and smacks .....	25,000	
794 smelt shanties .....	11,910	
		158,660
Totals .....		1,211,255



## SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.												FISH PRO- DUCTS.	TOTAL VALUE OF ALL FISH.	Number.							
	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Sturgeon, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked fin- nan haddies.	Hake, dried, cwt.	Pollock, cwt.	Trout, lbs.	Shad, brls.	Shad, fresh, No.	Alewives or gaspareau, brls.				Alewives, smoked, lbs.	Bas, lbs.	Pickarel, lbs.	Eels, brls.	Sardines, brls.	Coarse and mixed fish, brls.	Fish oil, galls.
<i>St. John County.</i>	460	98	5		485 2975	780000	470	500	505			16476	165500			120	75					1
	2800	280			450		5000	250														2
	1200	400			400		620	110	25								3500			200	3000	3
	520	200			385		890	300												400		4
	1100	120			4695	780000	985	660	620			16476	165500			120	3575			200	3400	5
Totals	6080	1098	5																			258,464 75
<i>Other Counties.</i>																						6
																						7
																						8
																						9
																						10
Totals																						11
Grand totals.	6080	1098	5		4695	780000	7965	660	100600	2290	3800	3465	8400	9000	141000	160	655	655	200	3400		73,083 00
																						331,547 75

\* Add 5 kegs of caviare.

1-2 EDWARD VII., A. 1902

## RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, New Brunswick, for the Year 1900.

Kinds of Fish.	Quantity.	Price.		Value.
		\$	cts.	
Salmon, fresh . . . . .	Lbs. 299,000	0	20	59,800 00
Herring, salted . . . . .	Brls. 1,385	4	00	5,540 00
" smoked . . . . .	Lbs. 230,000	0	02	4,600 00
White perch . . . . .	" 30,000	0	05	1,500 00
Lobsters, fresh or alive . . . . .	Cwt. 6,080	5	00	30,400 00
Cod . . . . .	" 1,098	4	00	4,392 00
Tongues and sounds . . . . .	Brls. 5	10	00	50 00
Sturgeon . . . . .	Lbs. 10,000	0	07	700 00
Haddock . . . . .	Cwt. 4,695	3	00	14,085 00
Finnan haddies . . . . .	Lbs. 780,000	0	06	46,800 00
Hake . . . . .	Cwt. 7,965	2	25	17,921 25
Pollock . . . . .	" 660	2	00	1,320 00
Trout . . . . .	Lbs. 100,600	0	10	10,060 00
Shad . . . . .	Brls. 2,290	10	00	22,900 00
Shad, fresh . . . . .	No. 3,800	0	10	380 00
Alewives . . . . .	Brls. 19,941	4	00	79,764 00
Smoked alewives . . . . .	Lbs. 173,900	0	02	3,478 00
Bass, sea . . . . .	Lbs. 9,000	0	10	900 00
Pickarel . . . . .	" 141,000	0	05	7,050 00
Eels . . . . .	Brls. 280	10	00	2,800 00
Sardines . . . . .	" 3,575	1	50	5,362 50
Caviare . . . . .	Kegs. 5	35	00	175 00
Coarse fish . . . . .	Brls. 655	2	00	1,310 00
Bait . . . . .	" 3,400	3	00	10,200 00
Oil . . . . .	Galls. 200	0	30	60 00
				331,547 75

## RECAPITULATION

Of Number and Value of Vessels, Boats, Nets, &c., engaged in the Fisheries in District No. 3, New Brunswick, for the Year 1900.

Materials.	Value.		Totals.
	\$	cts.	
9 fishing vessels (206 tons) . . . . .	4,700	00	418,110 00
1,100 " boats . . . . .	11,955	00	
355,200 fathoms gill nets . . . . .	328,225	00	
28 seines (2,380 fathoms) . . . . .	6,120	00	
245 trawls . . . . .	7,350	00	
42 weirs . . . . .	18,200	00	
156 canoes . . . . .	1,560	00	
10,000 lobster traps . . . . .	10,000	00	
59 ice houses . . . . .	8,600	00	
107 smoke houses . . . . .	43,600	00	
73 piers and wharfs . . . . .	39,100	00	95,300 00
8 steamers and smacks . . . . .	4,000	00	
			513,410 00





RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fish, &c.—  
**New Brunswick—Continued.**

COUNTIES.	FISHING GEAR OR MATERIALS.— <i>Con.</i>				LOBSTER PLANT.				OTHER FIXTURES USED IN FISHERIES.									
	Smelt Nets.		Hand Lines.		Canneries.		Traps.		Number of hands em- ployed.	Freezers and Ice Houses.		Smoke and Fish Houses.		Piers and Wharfs.		Tugs, Steamers and Smacks.		
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
	194	10150			2	1600	4100	3100	72	15	10000	3	500	1	200	4	3500	1
1 Restigouche .....	264	9400	3300	2600	67	51500	85300	81000	1730	56	15900	117	18420	14	10000	45	5500	2
2 Gloucester .....	870	57800	300	425	16	15000	15300	13000	346	51	24500	130	12500	18	6000	3	8000	3
3 Northumberland .....	665	30000	1180	385	55	18860	52700	47000	1000	16	7650	27	3300	20	750	3	8000	4
4 Kent .....	212	10150	240	65	85	28500	60000	52000	1750	75	1500	195	8300	18	8200	2	2000	5
5 Westmorland .....												1	30					6
6 Albert .....							10000	10000		30	6000	66	40900	73	39100	8	4000	7
7 St. John .....										9	1100	13	650					8
8 King's .....										10	500	20	1000					9
9 Queen's .....										5	250	6	900					10
10 Sunbury .....										5	750	5	750					11
11 York .....																		12
12 Carleton .....																		13
13 Victoria .....																		14
14 Charlotte .....	26	252	1542	1085	12	29000	19461	16610	542	8	5650	755	140460	227	38740	24	12300	14
Totals .....	2231	117752	6562	4560	237	144460	246861	222710	5440	280	73800	1338	227110	353	96990	104	41300	

## SESSIONAL PAPER No. 22

RECAPITULATION showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

COUNTIES.	KINDS OF FISH.																			
	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Number.
1 Restigouche.....	197500	10300	500	74400	1550	30000	30000	46000	80	22600	235	140	.....	.....	.....	4700	8200	.....	62000	1
2 Gloucester.....	326000	10300	500	8025	191000	2000	303000	130	618020	655	76270	160	.....	.....	.....	300	.....	.....	3500	2
3 Northumberland.....	359500	300	600	33650	60000	.....	407000	900	418600	450	2350	18	.....	.....	.....	4360	5160	.....	5600	3
4 Kent.....	29600	5200	59100	200	154000	4210000	23000	230	786320	2500	90	.....	.....	.....	.....	20	.....	.....	.....	5
5 Westmorland.....	5200	3000	200	850	3000	230000	.....	.....	.....	6080	1098	5	.....	.....	.....	7965	660	.....	.....	6
6 Albert.....	3000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
7 St. John.....	215600	.....	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
8 King's.....	20000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
9 Queen's.....	4400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
10 Sunbury.....	3000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
11 York.....	40000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
12 Carleton.....	6000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
13 Victoria.....	10000	.....	.....	.....	.....	.....	7000	.....	99552	9539	3309	.....	571900	1063	83000	12005	13252	18884	20000	14
14 Charlotte.....	3850	.....	3386	3262500	2167000	6639000	786000	1430	20386612	19729	85197	183	571900	7108	863000	29350	26612	19544	91100	.....
Totals.....	1223650	10600	1100	181696	3723500	6639000	786000	1430	20386612	19729	85197	183	571900	7108	863000	29350	26612	19544	91100	.....

RECAPITULATION showing the Quantity and Value of Fish, &amp;c.—New Brunswick—Continued.

COUNTIES.	KINDS OF FISH.																	TOTAL VALUE OF ALL FISH.	Number.	
	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Bas, lbs.	Pickarel, lbs.	Eels, brls.	Sardines, brls.	Oysters, brls.	Clams, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			Seal skins, number.
1 Restigouche..	13000	...	581700	...	38000	...	95	...	...	...	32000	22000	...	...	80	20	410	220	87,181 00	1
2 Gloucester..	28000	50	1094000	1200	250000	...	680	...	1070	6050	47000	141000	455	2500	25450	18200	38000	56	988,114 00	2
3 Northumberland	30000	1650	3350000	1500	250000	...	400	+	10000	450	10000	1343000	...	300	400	15020	8000	...	534,325 00	3
4 Kent.....	18500	155	1692000	1920	22200	...	450	...	6420	13140	24000	300000	20	2090	2250	6500	10500	8	505,540 00	4
5 Westmorland	16500	2000	1130000	820	8000	...	300	...	1750	3150	1000	380000	500	500	200	33500	42000	8	677,359 00	5
6 Albert.....	8000	200	2000	...	400	...	40	...	...	...	...	30000	...	...	50	50	...	...	6,785 00	6
7 St. John.....	...	620	...	*16476	...	...	120	3575	...	...	...	...	...	...	...	200	3400	...	258,464 75	7
8 King's.....	26000	400	...	...	9000	20000	50	...	...	...	...	...	...	110	...	...	...	...	17,791 00	8
9 Queen's.....	8000	750	...	1300	28000	40	...	...	45	...	...	...	...	45	...	...	...	...	16,334 00	9
10 Sunbury..	1600	65	...	1200	36000	20	...	...	...	...	...	...	...	...	...	...	...	...	8,358 00	10
11 York.....	30000	400	...	450	40000	25	...	...	...	...	...	...	...	160	...	...	...	...	21,120 00	11
12 Carleton..	10000	30	...	90	12000	15	...	...	...	...	...	...	...	100	...	...	...	...	3,880 00	12
13 Victoria..	25000	25	...	25	5000	10	...	...	...	...	...	...	...	200	...	...	...	...	5,600 00	13
14 Charlotte..	18000	...	13350	250	...	5000	...	+97541	...	4655	11900	3500	129	20	25060	9793	2580	5	638,890 65	14
Totals.....	232600	6345	7863050	25631	327600	146000	2245	101116	19240	27445	125900	1877500	1104	6195	53630	88823	101300	77	3,769,742 40	40

NOTE.—In No. 11 add 30,000 lbs. Perch. In No. 7 add 10,000 lbs. Sturgeon and five kegs of Caviare. \*165,500 smoked Alewives. †60,000 cans. ‡1,810,000 cans.



## SESSIONAL PAPER No. 22

## RECAPITULATION

Of the Yield and Value of the Fisheries of the whole Province of **New Brunswick**,  
for the Year 1900.

Kinds of Fish.	Quantity.	Price.	Value.	Total Value.
		\$ cts.	\$ cts.	\$ cts.
Cod, dried.....Cwt.	85,947	4 00	343,788 00	
Cod tongues and sounds.....Brls.	183	10 00	1,830 00	345,618 00
Haddock, dried.....Cwt.	7,108	3 00	21,324 00	
" fresh.....Lbs.	571,900	0 03	17,157 00	
" smoked (finnan haddies)....."	866,600	0 06	52,140 00	90,621 00
Hake, dried.....Cwt.	29,350	2 25	66,037 50	
" sounds.....Lbs.	26,612	0 50	13,306 00	79,343 50
Pollock.....Cwt.	19,544	2 00	39,088 00	
Tom cod or frost fish.....Lbs.	1,877,500	0 05	93,875 00	
Halibut....."	91,100	0 10	9,110 00	
Flounders....."	125,900	0 05	6,295 00	
Salmon, fresh....."	1,223,650	0 20	244,730 00	
" preserved in cans....."	10,600	0 15	1,590 00	
" smoked....."	1,100	0 20	220 00	246,540 00
Trout, fresh....."	232,600	0 10	23,260 00	
Smelts....."	7,863,050	0 05	393,152 50	
Herring, salted.....Brls.	181,696	4 00	726,784 00	
" fresh.....Lbs.	3,723,500	0 01	37,235 00	
" smoked....."	6,639,000	0 02	132,780 00	
" kippered, cans....."	228,200	0 10	22,820 00	919,619 00
Sardines.....Brls.	101,116		200,444 50	
" preserved in.....Cans	1,870,000	0 05	93,500 00	293,944 50
Shad.....Brls.	6,383	10 00	63,830 00	
Alewives....."	26,500	4 00	106,002 00	
Eels....."	2,245	10 00	22,450 00	
Perch.....Lbs.	30,000	0 05	1,500 00	
Pickarel....."	146,000	0 05	7,300 00	
Sea Bass....."	327,600	0 10	32,760 00	
Mackerel, fresh....."	786,000	0 12	94,320 00	
" salted.....Brls.	1,430	15 00	21,450 00	115,770 00
Sturgeon.....Lbs.	10,000	0 07	700 00	
" caviare.....Kegs	5	35 00	175 00	875 00
Oysters.....Brls.	19,240	4 00	76,960 00	
Clams....."	27,445		56,739 00	
" preserved.....Cans	60,520	0 10	6,052 00	62,791 00
Scallops.....Lbs.	31,300	0 15	4,695 00	
Squid.....Brls.	1,104	4 00	4,416 00	
Lobsters, preserved in cans.....Lbs.	2,038,692	0 20	407,738 40	
" fresh in shell.....Cwt.	19,729	5 00	98,645 00	506,383 40
Coarse and mixed fish.....Brls.	6,195	2 00	12,390 00	
Fish as bait....."	88,823	1 50	133,234 50	
Fish as manure....."	101,300	0 50	50,650 00	
Fish oil.....Galls.	53,630	0 30	16,089 00	
Dulse.....Lbs.	99,500	0 06	5,970 00	
Seal skins.....No.	77		110 00	
Total for the year 1900.....				3,769,742 40
" " " 1899.....				4,119,891 20
Decrease.....				350,148 80

## RECAPITULATION

OF the Fishing Vessels, Boats, Nets, and other Materials used in the whole Province  
of **New Brunswick**, for the Year 1900.

Articles.	Value.		Total.	
	\$	cts.	\$	cts.
299 fishing vessels (4,058 tons) .....	135,100	00		
7,050 fishing boats .....	257,752	00		
1,089,620 fathoms of gill nets .....	718,074	00		
14,561 " seines .....	32,535	00		
2 trap nets .....	3,000	00		
2,231 smelt nets .....	117,752	00		
350 bass nets .....	1,850	00		
434 weirs .....	183,910	00		
1,148 trawls .....	14,614	00		
6,562 hand lines .....	4,560	00		
			1,469,147	00
237 lobster canneries .....	144,460	00		
246,861 " traps .....	222,710	00		
			367,170	00
5 sardine canneries .....	41,000	00		
12 other fish preserving establishments .....	13,600	00		
1 guano factory .....	5,000	00		
40 fish presses .....	3,000	00		
280 freezers and ice houses .....	73,800	00		
1,338 smoke and fish houses .....	227,110	00		
353 fishing piers and wharfs .....	96,990	00		
104 tugs and smacks .....	41,300	00		
156 fishing canoes .....	1,560	00		
70 scows for weirs .....	4,000	00		
70 pile drivers .....	5,500	00		
794 smelt shanties .....	11,910	00		
			524,770	00
Total .....			2,361,087	00

Number of Persons Employed in the **New Brunswick Fisheries** :—

Men employed in fishing vessels .....	1,080
" " " boats .....	11,559
Persons " " lobster canneries .....	5,440
Total .....	18,079

SESSIONAL PAPER No. 22

## APPENDIX No. 5.

## PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF PRINCE EDWARD ISLAND FOR THE  
YEAR 1900, BY INSPECTOR J. A. MATHESON.

CHARLOTTETOWN, P.E.I., January 2, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit my report of the fisheries of this province for the year 1900, together with a synopsis of the reports of the overseers, the statistical tables, and the usual comparative statements.

The returns show an increase in the value of fish taken last year of \$15,551.

Total for 1899.....	\$1,043,646
“ 1900.....	1,059,197

## LOBSTERS.

I regret having to report a decrease in the catch of lobsters. Although the number of traps and factories has increased, the pack has run short to the extent of nearly \$50,000.

On the south side the fish were satisfactory in size, but on the north, they were not only scarce, but small.

## HERRING.

This fish was quite plentiful, and sufficient quantities were secured for bait.

## COD.

Cod fishing commenced about May 20, and large quantities of good sized fish were taken with trawls.

Fishermen at Nail Pond and at Skinner's Pond derived a great advantage over other sections in being able to procure bait from cold storage, a freezer having been erected in that locality, which is highly appreciated by the fishermen. The heavy storm on September 12, when several Caraqueet boats and crews were lost off Tignish, broke up the fall fishing, otherwise the catch would have been much larger.

## MACKEREL.

I am pleased to report that this fish has apparently returned to this coast, after an almost complete absence for several years. Large schools appeared about July 20, and remained about two weeks, during which time some good catches were made. Fishermen are looking forward to a recurrence of the large catches of former times.

## OYSTERS

This fishing was about an average one in Prince County. It now looks as if, under proper protection, the catch can be maintained in Richmond Bay which contains the principal beds. As anticipated in last year's report, the placing of special guardians at the different landings in Prince County for preventing the landing of undersized fish has had very beneficial results. In Queen's County, the catch has fallen off about 33 per cent in the last year. I would recommend that North and West Rivers be closed for a year or two.

SMELT fishing was not quite as good as usual.

TROUT fishing was well up to the average.

## OVERSEERS' REPORTS.

*Overseer Davison, of Prince County*, reports an increase in herring, cod, eels and mackerel, the latter especially being more plentiful than for several years. He attributes the increase in cod to the fact that fishermen were enabled to procure bait from the freezers. In this county the decrease in the lobster catch was due to overfishing. Eighty-five per cent of the total catch was exported to Ontario, United States and even to Europe, and the remainder was used for home consumption.

*Overseer James A. McCormack, of King's County*, reports a decrease in the lobster catch on the north side. This he attributes to the prevailing north winds which prevented the boats from fishing. Herring was not fished for with the usual vigour, owing to the lack of demand occasioned through vessels not seeking bait as in former years. Lobster-packers are well satisfied with the present opening season and wish the regulations strictly enforced.

I have the honour, to be, sir,  
Your obedient servant,

J. A. MATHESON,  
*Inspector of Fisheries.*



## SESSIONAL PAPER No. 22

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., in the County of Prince, Province of Prince Edward Island, for the Year 1900.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.							
	Vessels.			Boats.			Gill Nets.			Seines.			Herring.		Mackerel.		Lobsters.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Salted, brls.	Fresh, lbs.	Salted, brls.	Preserved in cans, lbs.	Fresh, cwt.		
Prince County.																				
1	Tignish.....	1	12	250	4	102	3500	216	200	5000	1000	1	150	500	5000	44000	152	170400	.....	1
2	Nail Pond.....	.....	.....	.....	64	2980	125	82	1673	719	3	1370	1600	.....	.....	48000	204	67132	.....	2
3	Frog Pond.....	.....	.....	.....	57	1320	86	77	1550	385	.....	.....	.....	.....	.....	34960	47	36228	.....	3
3	Mimigash.....	.....	.....	.....	60	2037	149	188	3765	1380	.....	.....	.....	.....	.....	240	498	30700	.....	4
5	Alberton.....	2	112	2400	16	41	2255	101	125	3875	1705	2	500	700	500	212400	114	62256	.....	5
6	Narrows and Lot 11.....	.....	.....	.....	22	880	40	40	800	180	.....	.....	.....	.....	.....	.....	50	49000	.....	6
7	Ellerslie Lot 12.....	.....	.....	.....	23	1475	78	85	1500	275	.....	.....	.....	.....	.....	.....	50	49000	.....	7
8	Grand River.....	14	510	28	15	420	210	100	2000	1000	1	120	300	.....	.....	.....	30	34560	.....	8
9	Malpeque.....	.....	.....	.....	90	3000	300	100	2000	1000	1	120	300	.....	.....	.....	30	34560	.....	9
10	Richmond Bay.....	.....	.....	.....	80	2400	175	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	10
11	Roxbury Lot 6.....	.....	.....	.....	4	90	6	14	265	42	1	100	250	71	30600	400	.....	.....	.....	11
12	Fifteen Point.....	.....	.....	.....	115	5870	270	188	3385	897	.....	.....	.....	.....	.....	.....	200	273864	.....	12
13	Brae.....	.....	.....	.....	18	720	36	35	700	70	.....	.....	.....	.....	.....	.....	200	33120	.....	13
14	West Point.....	.....	.....	.....	40	1600	120	150	1200	600	.....	.....	.....	.....	.....	.....	246	21640	.....	14
15	Traveller's Rest.....	.....	.....	.....	110	2200	220	4	60	24	.....	.....	.....	.....	.....	.....	5	.....	.....	15
16	Summerside.....	.....	.....	.....	10	200	15	10	230	20	.....	.....	.....	.....	.....	.....	5	.....	.....	16
17	Carleton.....	.....	.....	.....	36	1800	72	95	1900	200	.....	.....	.....	.....	.....	.....	5	63936	.....	17
18	Tryon.....	.....	.....	.....	45	1340	87	62	1172	200	.....	.....	.....	.....	.....	.....	.....	114624	.....	18
Totals.....		4	134	2950	23	931	34177	2124	1470	29495	8907	8	2240	4350	17114	312110	83600	1007460	60	.....
Values.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68456	3121	10032	24795	201492	300	.....

RETURN showing the Quantity of Fish, &amp;c.--Prince Edward Island.—Continued.

KINDS OF FISH.										TOTAL VALUE OF ALL FISH.		Number.								
DISTRICTS.	Cod.		Haddock.		Hake.		Halibut, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Oysters, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	¢	cts.	Number.
	Dried, cwt.	Tongues and sounds, brls.	Fresh, lbs.	Dried, cwt.	Dried, cwt.	Sounds, lbs.														
Prince County.																				
1 Tignish.....	2000	.....	.....	50	1000	4500	5000	3	6000	.....	.....	.....	.....	.....	3000	2000	1185	73,740	00	1
2 Nail Pond.....	5350	10	.....	200	200	500	1000	.....	.....	.....	.....	.....	.....	.....	382	1185	115	57,157	50	2
3 Frog Pond.....	224	.....	.....	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	145	1000	.....	19,473	90	3
4 Minnigash.....	1410	.....	.....	.....	950	800	.....	.....	4100	.....	3	.....	9	48	984	1200	.....	29,438	50	4
5 Alberton.....	135	.....	.....	.....	.....	.....	.....	.....	20000	.....	.....	.....	.....	.....	.....	575	.....	20,687	70	5
6 Narrows and Lock 11.....	.....	.....	.....	.....	.....	.....	.....	.....	4000	.....	.....	.....	.....	.....	.....	500	.....	9,108	40	6
7 Ellerslie Lock 12.....	750	.....	.....	60	43	.....	500	.....	6000	.....	.....	1250	.....	.....	250	2400	.....	*33,211	75	7
8 Grand River.....	100	.....	.....	.....	.....	.....	.....	.....	14000	.....	50	1500	.....	.....	80	515	.....	14,978	10	8
9 Malpeque.....	4000	.....	.....	.....	.....	.....	.....	.....	3000	.....	.....	900	.....	.....	200	200	.....	29,072	00	9
10 Richmond Bay.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	15	300	.....	20,176	50	10
11 Roxbury Lock 6.....	30	.....	2100	.....	10	.....	.....	.....	45575	.....	35	103	.....	.....	25	.....	.....	3,891	75	11
12 Fifteen Point.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4256	.....	67,356	80	12
13 Bruc.....	50	.....	.....	.....	.....	.....	.....	.....	16000	50	4	.....	.....	.....	.....	1070	.....	12,169	00	13
14 West Point.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1600	350	13,488	00	14
15 Traveller's Rest.....	.....	.....	.....	.....	.....	.....	.....	.....	30000	.....	6	5200	.....	.....	.....	.....	.....	20,920	00	15
16 Summerside.....	.....	.....	.....	.....	.....	.....	.....	.....	40000	.....	10	110	.....	.....	.....	40	.....	2,575	00	16
17 Carleton.....	.....	.....	.....	.....	.....	.....	.....	.....	9050	.....	.....	.....	.....	.....	.....	1350	.....	18,227	20	17
18 Tryon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1700	.....	26,727	30	18
Totals.....	14052	10	2100	310	2233	5800	6500	3	197725	50	111	13685	20	48	5081	19891	465	.....	.....	.....
Value.....	56208	100	63	930	5024	2900	650	30	9886	200	1110	54740	80	96	1524	29836	465	472,399	40	.....

\* Add 1200 bushels of quahogs.

## SESSIONAL PAPER No. 22

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fish, &c.—**Prince Edward Island—Continued.**

Number.	DISTRICTS.	FISHING BOATS.			FISHING GEAR AND MATERIALS.						KINDS OF FISH.							Number.			
		Number.	Value.	Men.	Gill Nets.			Sienes.			Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.		Cod, tongues & sounds, cwt.		
					Number.	Fathoms.	Value.	Number.	Fathoms.	Value.											
<i>Queen's County.</i>																					
1	Tracadie.....	80	2400	140	350	7000	2200	.....	.....	.....	1500	20000	10000	300	63840	20	2000	30	1		
2	New London.....	70	2000	130	120	3800	1000	.....	750	700	2000	40000	.....	400	60000	.....	1800	25	2		
3	Crapaud.....	26	780	60	15	125	100	.....	.....	.....	100	1000	.....	.....	48576	.....	.....	.....	3		
4	Point Prim.....	90	2250	200	90	2500	680	2	270	250	100	.....	.....	.....	93792	20	.....	.....	4		
5	Rustico.....	90	2500	200	90	2500	680	2	270	250	3500	.....	.....	3000	116352	10	2500	.....	5		
6	Charlottetown.....	30	300	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1500	.....	6		
7	Wheatley River.....	3	150	6	20	100	40	.....	.....	.....	100	.....	.....	.....	86160	25	.....	.....	8		
8	Lot 65.....	90	1550	130	10	100	75	.....	.....	.....	.....	.....	.....	.....	31104	.....	.....	.....	9		
9	Pownal.....	34	270	60	.....	.....	.....	.....	.....	.....	2000	.....	.....	.....	.....	.....	.....	.....	10		
10	Bays and River.....	40	400	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
	Totals.....	553	12600	1046	605	13625	4095	4	1020	950	9300	61000	13000	1000	499824	75	7800	55	.....		
	Values.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37200	610	1560	15000	99964	375	31200	550	.....		

## RETURN showing the Quantity and Value of Fish and Fish Products, &amp;c.—Prince Edward Island—Continued.

Number.	Districts.	KINDS OF FISH— <i>Con.</i>														TOTAL VALUE OF ALL FISH.	Number.			
		Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lbs.	Trou	Smelts, lbs.	Alewines or gaspereau, brls.	Clams, brls.	Reels, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	Seal skins, number.	
1	Tracadie.....	2500	5000	.....	.....	500	40000	1000	20	300	1600	.....	.....	1200	300	100	.....	64,583 00	1	
2	New London.....	25	1000	30	1500	600	20000	150	20	10	100	.....	.....	1000	250	75	.....	40,058 25	2	
3	Crapaud.....	.....	.....	.....	.....	.....	5000	.....	.....	.....	.....	.....	.....	.....	300	60	.....	10,885 20	3	
4	Point Prim.....	.....	.....	.....	.....	2000	5000	20	40	6	600	50	.....	.....	.....	100	40	.....	22,588 40	4
5	Rustico.....	.....	.....	400	.....	400	10000	20	40	15	.....	.....	.....	.....	.....	130	.....	54,310 90	5	
6	Charlottetown.....	.....	.....	.....	.....	2000	10000	.....	50	25	.....	.....	.....	.....	.....	.....	.....	700 00	6	
7	Wheatley River.....	.....	.....	.....	.....	200	6000	.....	.....	10	800	.....	.....	.....	.....	.....	.....	6,800 00	7	
8	Lot 65.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,057 00	8	
9	Pownal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,250 80	9	
10	Bays and Rivers.....	.....	.....	.....	.....	5000	400000	600	150	.....	1000	.....	.....	.....	.....	.....	.....	35,900 00	10	
	Totals.....	2525	6000	430	1500	10700	496000	1790	320	366	4100	50	112	2700	850	495	40	263,133 55		
	Values.....\$	75	18000	967	150	1070	24800	7160	1280	3600	16400	2.50	448	810	1275	495	80			













SESSIONAL PAPER No. 22

## RECAPITULATION

SHOWING Yield and Value of the different Fisheries in the Province of Prince Edward Island during the Year 1900.

Kinds of Fish.	Quantity.	Price.	Value.
		\$ cts.	\$ cts.
Salmon, smoked.....Lbs.	500	0 20	100 00
Herring, salted.....Brls.	35,664	4 00	142,656 00
" fresh.....Lbs..	469,110	0 01	4,691 10
Mackerel, fresh....."	96,600	0 12	11,592 00
" salted.....Brls.	3,613	15 00	54,195 00
Lobsters, canned.....Lbs.	2,223,712	0 20	444,742 40
" fresh.....Cwt.	135	5 00	675 00
Cod, dried....."	38,352	4 00	153,408 00
" tongues and sounds.....Brls.	163	10 00	1,630 00
Haddock, fresh.....Lbs.	4,625	0 03	138 75
" dried.....Cwt.	6,635	3 00	19,905 00
Hake, dried....."	15,263	2 25	34,341 75
" sounds.....Lbs.	31,000	0 50	15,500 00
Halibut....."	8,500	0 10	850 00
Trout....."	40,700	0 10	4,070 00
Shad.....Brls.	3	10 00	30 00
Smelts.....Lbs.	704,325	0 05	35,216 25
Alewives.....Brls.	2,080	4 00	8,320 00
Quahogs.....Bush.	1,200	0 30	360 00
Eels.....Brls.	551	10 00	5,510 00
Clams....."	940	4 00	3,760 00
Oysters....."	17,825	4 00	71,300 00
Tom cod.....Lbs.	10,050	0 05	502 50
Squid.....Brls.	622	4 00	2,488 00
Coarse and mixed fish....."	203	2 00	406 00
Fish oil.....Galls.	18,131	0 30	5,439 30
Fish for bait.....Brls.	23,341	1 50	35,011 50
Fish as manure.....Tons.	2,185	1 00	2,185 00
Seal skins.....No.	85	2 00	170 00
Total.....			1,059,193 55

# RECAPITULATION

SHOWING the Number and Value of Vessels, Boats, Nets, Lobster Canneries, Traps, &c., used in the Fisheries of the Province of Prince Edward Island, Season, 1900.

Articles.	Value.	Total.
	\$ cts.	\$ cts.
19 fishing vessels, (750 tons).....	13,850 00	
2,330 fishing boats.....	64,167 00	
5,105 gill nets, (103,720 fathoms).....	31,182 00	
12 seines, (3,260 fathoms).....	4,300 00	
231 trap nets.....	2,220 00	
782 trawls.....	9,091 00	
195 dip nets.....	390 00	
195 smelt nets.....	4,317 00	
4,878 hand lines.....	3,298 00	
		132,815 00
246 lobster canneries.....	103,805 00	
302,117 lobster traps.....	164,645 00	
		268,450 00
6 freezers and ice houses.....	6,800 00	
455 smoke and fish houses.....	3,350 00	
31 piers and wharfs.....	30,205 00	
3 steamers and smacks.....	500 00	
		40,855 00
Total value.....		442,120 00

Number of persons employed in the fisheries of Prince Edward Island—

Men in fishing vessels.....	99
" " boats.....	4,895
Persons in lobster canneries.....	3,184
Total .....	<u>8,178</u>

## APPENDIX No. 6.

## ONTARIO.

## GENERAL REMARKS.

Last year in this province 1,893,000 fathoms of gill net, 471 pound nets, 499 hoop or fyke nets, 95 seines, 107 dip nets, 3 machines, and several thousand baited hooks were used.

This occupation has given employment to 2,502 men, 91 tugs and 1,187 boats.

An estimated capital of \$789,042 is invested in the industry.

The aggregate catch amounts to 25,698,591 pounds, which shows a decrease as compared with last year of 1,789,888 pounds, and is valued at \$1,333,293.82.

While there has been a considerable falling off in our principal food fishes—the whitefish, lake trout, herring and pickerel, there has been a marked increase in the quantity of the coarser varieties taken.

As has been reported, if the fisheries in the Lake of the Woods are ever depleted by over-fishing, the blame will certainly be more easily laid against the State of Minnesota than the province of Ontario, as, until last year, licenses on the American side were issued indiscriminately, with very few provisions attached, and at a fee of only \$10 per pound net, as compared with the policy pursued by the Canadian authorities of limiting the number of licenses, and the higher fee of \$50. There were something over 250 pound net licenses issued on the American side, while but 34 were issued on the Canadian side.

There can be but little doubt that the past year has in many places been the most unfavourable in years for fishing operations, owing to the heavy storms which have visited our lakes, and the shortage in most places is in a large measure attributed to this cause. Particularly was this the case on Lake Erie and the Georgian Bay, where the results to the fishermen, not only from the diminution of the catch, but on account of the destruction of nets and other gear, were most disastrous.

Another cogent reason given for the shortage from the Georgian Bay and Lake Superior is, that owing to the large quantity of frozen fish held over from the previous year, fishing operations in these waters were not prosecuted so vigorously nor so late as in former years.

The unfavourable weather also made it practically impossible for the fishermen to take advantage of the extension of the open season which was granted, and on the whole it is doubtful if the results of such extensions are not rather a detriment than a benefit.

A new species of herring was last year reported in Lake Ontario, being thought to be a cross between the blue-backed herring and the cisco. The species is said to be increasing, and it is believed will ultimately be as numerous as the cisco of former years. It is larger than the cisco, and is said to command a better price in the market.

It will also be noticed that the quantity of sturgeon is largely in excess of that taken last year. In Lake Erie, where for many years there has been a gradual decrease, there is this year an increase of over 26,000 pounds, the total catch being 169,925 pounds. This fish has greatly increased in value, not only on account of the demand for its flesh, but more particularly from the caviare prepared from its eggs, and the

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NOTE.—In these remarks on the Ontario fisheries reliance has been largely placed upon the published Provincial reports.

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taking of radical measures for the prevention of its extinction has been suggested. On the other hand, the fishermen allege that it is most destructive of the eggs of other fish, and that gallons of freshly absorbed spawn have been taken from a single sturgeon. In that case it is a question whether it is expedient that any steps should be adopted in the direction of protection.

## VIOLATIONS IN THE GEORGIAN BAY.

The past year has been no exception to its predecessors as to the amount of illegal fishing carried on in these waters, and perhaps no other waters in the province have been subjected to so much vigilance and assiduous attention on the part of fishery officers. One hundred and nineteen trap nets, and many yards of illegally fished gill nets, have been lifted. The trap nets have been invariably destroyed, as being an implement of capture prohibited by the Fisheries Act of the Dominion. Where the gill nets are of a mesh which is authorized by the department, these nets are sold where possible, and the amounts received therefor placed to the credit of the treasurer of the province.

## COMMERCIAL FISHERIES.

For many years our great lake fisheries have contributed a considerable portion of the fish food not only of the people of our own province but of the neighbouring republic. Perhaps 95 per cent of the whole catch is consumed in the United States. If there is one industry in the province more than another that deserves protection and attention, it is this great fishing industry, as it affects most vitally not only the present population, but future generations. The hatcheries are doing a great work towards replenishing the drain upon the whitefish and the lake trout, no fewer than 98,625,000 fry having been deposited in Ontario waters this year; The view that the introduction of such vast quantities of artificially hatched fry renders unnecessary legal close seasons finds favour in many quarters, and the suggestion that such enactments should be abolished is supported by the policy adopted very largely in the United States' portions of the great lakes. Canadian fishermen complain that our laws compel them to cease fishing operations whereas the States bordering on the great lakes either have no such prohibitory regulations or they make no effort to enforce them. The considerations based upon these facts have frequently had such weight that the November close season has been frequently curtailed and our fishermen have thus continued fishing for ten or fifteen days after the close season, by law had commenced. Thus vast schools of spawning fish have been taken especially whitefish just as they approached the spawning beds. This destruction of breeding whitefish must, to a large extent, render ineffectual the efforts to increase the supply by artificial propagation. Of course the capture of fish at any time lessens the total number in any given area; but when the capture is made just about spawning time untold millions of eggs ready to be deposited are taken and destroyed, and the fry which would be hatched from such eggs had protection been afforded, would have helped to replenish the waters in the future.

In spite of all such unfavourable circumstances the fishermen generally regard the planting of whitefish as highly beneficial and they would strongly favour the enforcement of close seasons if the United States authorities did the same.



## SESSIONAL PAPER No. 22

A. G. Duncan, Dominion fishery inspector for Western Ontario, states that he noticed a great deal of destitution and depravity amongst the Indian residents of the Nepigon district, owing, in his opinion, to the want of employment to enable them to secure the necessaries of life. Game is becoming scarce and difficult to obtain; they depend a great deal on fish; some of them had potatoes, but few had anything to buy flour or clothing with. At their request, he recommends that Lake Nepigon be leased to some reliable person who would guarantee to employ them to fish or buy their fish. If this were carried out, he feels certain that a great deal of distress among the Indian population would be relieved.

Mr. Duncan deplors the fact that most of the fisheries of his large district are controlled by a powerful syndicate of United States citizens, who keep the earning rates of our Canadians at the minimum. He even recommends the appointment of a commission to inquire into this alleged injustice to the bona fide British subjects. He is of opinion that all fishing tugs in our waters should be captained and manned by Canadians, and that steam-lifting gear be done away with. By employing foreign crews it enables them to land Canadian catch in their own ports without reporting. Besides, this syndicate have their establishment at Sault Ste. Marie, on the Michigan side, where Canadian officers are debarred inspection and where none of our people are employed. The supplying of nets by this rich and obnoxious syndicate to our fishermen seldom turns to their advantage, as the cut rates in fish leaves a very small balance to the individual fisherman at the end of the season. The result is that, in order to live, they fish many more nets than licensed for. He regrets to see the perilous toil of our fishermen wasted for the benefit of foreign capitalists.

He has notified the mill-owners of Manitoulin Island to desist from throwing sawdust and rubbish in the waters of that locality.

## VALUE of the Ontario Fisheries from 1870 to 1900, inclusive.

Years.	Value.	Years.	Value.
	\$		\$
1870.....	264,982	1887.....	1,531,850
1871.....	193,523	1888.....	1,839,869
1872.....	267,633	1889.....	1,963,123
1873.....	293,091	1890.....	2,009,637
1874.....	446,267	1891.....	1,806,389
1875.....	453,194	1892.....	2,042,198
1876.....	437,229	1893.....	1,694,930
1877.....	438,223	1894.....	1,659,968
1878.....	348,122	1895.....	1,584,473
1879.....	367,133	1896.....	1,605,674
1880.....	444,491	1897.....	1,289,822
1881.....	509,903	1898.....	1,433,631
1882.....	825,457	1899.....	1,477,815
1883.....	1,027,033	1900.....	1,333,293
1884.....	1,133,724		
1885.....	1,342,692	Total.....	33,501,368
1886.....	1,435,998		



## SESSIONAL PAPER No. 22

## ARIO.

the Quantity and Value of all Fishing Materials ; also the Kinds and Quantities of Fish Ontario, during the Year 1900.

KINDS OF FISH.												TOTAL VALUE.	Number.
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickeral or Doré, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	Bladders, lbs.	
													\$ cts.
.....	102,576	16,518	.....	70,180	30,319	.....	52,334	4,662	72,835	11,415	6,773	135	23,178 90 1
.....	10,000	1,000	.....	5,000	.....	.....	.....	.....	.....	.....	.....	.....	1,150 00 2
.....	5,000	400	.....	400	12,000	15	.....	.....	.....	.....	.....	.....	940 90 3
.....	117,576	17,918	.....	75,580	42,319	15	52,334	4,662	72,835	11,415	6,773	135	.....
.....	9,406	1,791	.....	3,779	1,693	90	3,140	280	1,456	228	3,886	108	25,269 80
.....	300	15,200	50	2,000	4,000	.....	.....	.....	.....	.....	.....	.....	1,808 00
89,000	172,191	*552,783	.....	40,306	2,184	.....	11,629	.....	.....	853	1,162	.....	76,742 04 1
.....	20,000	480,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49,600 00 2
.....	3,189	9,075	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,162 62 3
.....	16,800	79,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,324 00 4
.....	172,000	121,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,860 00 5
.....	8,530	66,052	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,287 60 6
.....	9,036	2,873	.....	.....	.....	.....	450	.....	.....	.....	45	.....	1,058 68 7
.. . .	59,800	20,130	.....	.....	3,640	.....	1,200	.. . .	.....	.....	120	.....	7,074 60 8
89,000	461,546	1,331,703	.....	40,306	5,824	.....	13,279	.....	.....	853	1,327	.. . .	.....
1,780	36,924	133,170	.....	2,015	233	.....	796	.....	.....	117	663	.....	178,109 54

\* 251 brls. salted trout.

1-2 EDWARD VII., A. 1902

RETURN of the Number, Tonnage and Value of Vessels and Boats, and the Quantity

Number.	Districts.	FISHING MATERIALS.											
		Tugs or Vessels.				Boats.			Gill-nets.			Pound nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Value.
	<i>Lake Huron—North Channel.</i>			\$		\$							
1	Tenby Bay.....					2	140	2	5	6,000	40		
2	Hilton.....					1	100	1	1	900	20		
3	McBeths' Bay.....					1	125	2				3	450
4	Thessalon and Bruce Mines..												
5	Blind River.....	1	20	35,000	6	1	100	2	15	12,000	800	4	800
6	Spragge.....					2	200	2	12	12,000	800		
7	Johns Island.....	1	7	2,500	6							5	750
8	Aird Island.....	1	7	2,000	6	1	100					7	1,500
9	Darcke Island.....					1	125	2				3	450
10	Newport.....					4	475	8	25	24,000	1,600		
11	West Bay.....	1	9	1,000	4							5	1,500
12	Kagawong.....	1	5	1,500	4	1	100	2	26	24,600	1,100		
13	La Cloche Island.....	2	19	3,839	8	4	500	5				15	4,500
14	Little Current.....					1	75	3	1	1,000	45		
15	Gore Bay.....					2	225	4	12	12,000	800		
16	Cape Roberts.....	1	10	2,500	5	2	200	2				10	900
17	Meldrum Bay.....	1	20	3,000	6	3	275	6	19	18,500	1,550	4	600
18	Cockburn Island.....	2	16	4,500	9	6	650	8	30	30,000	2,500	13	2,000
19	Green Island.....					1	100	2	6	6,000	400		
20	Burnt Island.....					1	100	2	6	6,000	400		
21	Duck Island.....	3	23	6,500	13	10	1,000	16	80	83,000	5,550	3	500
22	South Bay Mouth.....	3	30	9,000	12	4	525	8	100	96,000	8,600		
23	Fitzwilliam Island.....					11	1,225	22	45	47,000	2,600		
24	Squaw Island.....	4	39	14,000	12	6	690	12	125	126,000	10,200		
25	Killarney.....					25	2,085	49	92	91,500	6,850		
26	Bustard Island.....	1	10	2,500	4	19	2,135	36	81	81,000	7,440		
	Totals.....	22	215	87,839	95	109	11,250	196	681	677,500	51,295	72	13,950
	Values.....\$												

\* In No. 1 add 75 lbs. Bass and 140 lbs. Maskinonge.



## SESSIONAL PAPER No. 22

and Value of Fish, &amp;c., in the Province of Ontario—Continued.

KINDS OF FISH.										TOTAL VALUE.	Number.
Herring, salted, brls.	Whitefish, lbs.	Trout, lbs.	Pickeral or Doré, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.		
										\$ cts.	
			500	7,024						320 36	1
	400	604		1,600						156 40	2
	12,000	5,000	10,000							1,960 00	3
	40,221	111,352	445							14,375 13	4
	2,000	4,335	38,407	331	4,651		1,655		465	3,071 75	5
	3,300	3,500	17,000	600	6,000		400		600	2,156 00	6
60	22,000	104,335	48,407	331	14,651		1,655		1,465	16,511 75	7
	6,000	13,005	96,321	993	12,963		4,961		1,296	8,161 27	8
	4,000	2,000								520 00	9
	28,000	23,000								4,540 00	10
	20,000	10,000	18,000	2,000	10,000				1,000	4,680 00	11
	19,000	40,000								5,520 00	12
	69,945	12,396	58,941	6,139	29,505		1,167		2,950	13,296 45	13
125										500 00	14
	18,000	8,100	21,000	500	3,700				370	3,727 00	15
	50,000	36,000	24,000		10,000				1,000	9,900 00	16
	19,000	151,000	4,000							16,820 00	17
23	103,651	86,621	16,445		6,028				602	18,449 11	18
	2,000	3,000								460 00	19
	15,000	230,000			600					24,236 00	20
18	149,204	85,000	20,000		5,000				500	22,058 32	21
17	101,000	127,000								20,848 00	22
	4,000	78,000								8,120 00	23
3	193,200	190,500	1,200							34,578 00	24
	249,000	175,000	77,000	12,000	18,000	600	900	600	1,800	43,778 00	25
	98,000	85,000	45,000	40,000	9,000		2,800	15,000	900	21,516 00	26
225½	1,228,921	1,584,748	496,666	71,518	130,098	600	12,538	15,600	12,948	.....	
902	98,313	158,474	24,833	2,860	7,806	18	251	312	6,474	300,259 54	

1-2 EDWARD VII., A. 1902

## RETURN of the Number of Tonnage and Value of Tugs, Vessels and Boats, and the

Number.	DISTRICTS.	FISHING MATERIAL.									
		Tugs or Vessels.				Boats.			Gill Nets.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.
	<i>Georgian Bay Division.</i>			\$		\$				\$	
1	Parry Sound.....					6	500	12	56	18000	300
2	Point au Baril.....	3	12	3500	12	6	550	12	200	108000	15000
3	Waubashene.....	1	5	1000	3	6	600	12	30	10000	2000
4	Victoria Harbour.....	1	4	800	3	6	600	12	30	15000	2000
5	Midland.....					11	1000	22	60	30000	3000
6	Penetanguishene.....					6	400	12	28	14000	1500
7	Collingwood.....	5	133	30000	29	22	2500	44	600	324000	30500
8	Owen Sound.....	5	82	10900	26	25	1235	44	300	148600	8741
9	Colpoys Bay to Tobermory.....	2	10	4000	8	26	965	53	275	165300	23471
	Totals.....	17	246	50200	81	114	8350	223	1559	838900	86512
	Value.....\$										
	<i>Lake Huron (proper.)</i>										
1	Cape Hurd to Southampton.....	5	124	15500	30	28	2250	61	250	246400	15400
2	Southampton to Goderich.....	1	15	1200	6	6	450	11	60	60330	3700
3	County of Huron, including Grand Bend division.....	1	22	3000	6	11	1065	24	50	49000	3000
4	Township of Bosanquet.....					13	831	27	35	36700	3165
5	" Plympton.....					8	480	10			
6	" Sarnia.....					30	1400	41	18	18000	180
	Totals.....	7	161	19700	42	96	6476	174	413	410430	25445
	Value.....\$										

## RETURN of the Number of Tonnage and Value of Tugs,

Number.	DISTRICTS.	FISHING MATERIALS.								
		Boats.			Gill Nets.			Seines.		
		Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Value.	Men.
	<i>Lake St. Clair.</i>		\$				\$			
1	River St. Clair.....	11	234	27	*2		10	10	799	540
2	Thames River.....	22	274	93	*21		105	24	1703	787
3	Lake St. Clair and Detroit River.....	59	2479	101	*2		10	18	1879	1440
	Totals.....	92	2987	221	25		125	52	4381	2767
	Values.....\$									

\* Dip nets.

## SESSIONAL PAPER No. 22

Quantity and Value of all Fish, &amp;c., in the Province of Ontario—Continued.

KINDS OF FISH.														TOTAL VALUE	Number.
Herring, salted.	Herring, fresh.	Whitefish.	Trout.	Pickrel or Doré.	Pike.	Sturgeon.	Perch.	Catfish.	Mixed and Coarse Fish.	Whitefish, salted.	Trout, salted.	Caviare.			
brls.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	bbls.	bbls.	lbs.	\$ cts.		
.....	.....	61413	35655	3639	4240	.....	.....	.....	.....	16	.....	.....	8,990 09	1	
.....	.....	42000	108000	33000	8000	.....	.....	.....	9000	.....	.....	.....	16,310 00	2	
35½	.....	7200	5000	38400	6350	550	.....	.....	8875	10½	10½	.....	3,812 50	3	
.....	.....	15000	20000	70000	5000	15000	.....	.....	4600	.....	.....	1500	8,642 00	4	
100	.....	30000	60000	40000	2000	2000	.....	.....	.....	80	300	200	14,900 00	5	
.....	.....	7000	6000	7100	3750	.....	.....	.....	.....	.....	.....	.....	1,665 00	6	
86	27900	79367	281580	1900	.....	28356	3700	.....	500	7	17	6476	40,804 72	7	
.....	2864	32200	567350	.....	.....	.....	.....	.....	.....	21	94	.....	60,518 28	9	
205	.....	.....	138900	.....	.....	.....	.....	.....	.....	.....	110	.....	15,810 00	8	
426½	30764	274180	1222485	194039	29340	45906	3700	.....	22975	134½	531½	8176	.....	.....	
1706	615	21934	122248	9703	1174	2754	111	.....	459	1345	5315	4088	171,452 59	.....	
291½	31400	14600	666700	200	.....	6000	5000	.....	2000	pcts. or ½ bl.	pcts. or ½ bl.	.....	.....	.....	.....
57	.....	1300	82500	.....	.....	.....	.....	.....	.....	3	746	680	74,277 00	1	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	794	.....	12,602 00	2	
.....	23941	4834	99870	30580	.....	7299	4421	2343	11700	.....	66	729	13,927 47	3	
8	21334	3950	16409	87269	.....	87269	5381	790	8050	.....	.....	8726	16,716 40	4	
.....	6750	21	35	42397	.....	3538	65	.....	1814	.....	.....	353	2,687 04	5	
15	104158	1449	1118	121105	.....	43743	2798	412	4136	.....	.....	4374	13,412 61	6	
371½	187583	26154	866632	281551	.....	147849	17665	3545	27700	13	1606	14862	.....	.....	
1486	3752	2092	86663	14077	.....	8871	530	71	554	65	8030	7431	133,622 52	.....	

Vessels and Boats, and the Quantity and Value of all Fish, &amp;c.

KINDS OF FISH.													TOTAL VALUE	Number.
Herring, fresh.	Whitefish.	Bass.	Pickrel or Doré.	Pike.	Maskinonge.	Sturgeon.	Perch.	Tullibee.	Catfish.	Mixed and Coarse Fish.	Caviare.			
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	\$ cts.		
3500	.....	.....	113247	300	.....	33250	700	.....	200	10872	3325	9,644 29	1	
.....	.....	.....	34064	3076	.....	25	200	1000	2181	82974	.....	3,596 84	2	
6442	20721	3913	44878	15536	3428	73383	19903	10500	49203	293652	7338	21,326 75	3	
9942	20721	3913	192189	18912	3428	106658	20803	11500	51584	387498	10663	.....	.....	
199	1658	313	9609	756	206	6399	624	690	1032	7750	5332	34,567 88	.....	

1-2 EDWARD VII., A. 1902

RETURN of the Number and Value of Tugs and Boats, and the Quantity and Value of Fish, &c., in the Province of Ontario—*Con.*

FISHING MATERIAL.												
Tugs or Vessels.			Boats.			Gill Nets.			Pound Nets.			
Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Value.	Number.
Lake Erie.												
1 Pelee Island .....	25	2200	14	8	870	15	158	12000	656	10	3000	1
2 County of Essex .....	98	9000	7	41	4168	55	...	...	...	52	17715	2
3 " Kent .....	194	14400	12	56	7885	87	...	...	...	83	33866	3
4 " Elgin .....	...	...	...	16	850	35	32	32000	2150	66	17820	4
5 Houghton and Long Point .....	84	15700	24	11	765	13	39	36000	2760	27	7600	5
6 Port Rowan Bay .....	...	...	...	31	685	82	2	2500	90	...	...	6
7 Normandale .....	...	...	...	13	585	21	8	8380	433	...	...	7
8 East of Port Dover .....	...	4000	12	9	570	30	35	34400	2535	14	3500	8
9 Cayuga to and including Grand River .....	40	8000	16	7	225	16	100	98000	9895	4	750	9
10 Port Maitland to Port Colborne .....	25	3000	5	12	413	19	44	35860	1980	...	...	10
11 " Colborne to Niagara Falls .....	...	...	...	14	600	21	40	42450	1235	2	500	11
Totals .....	18	466	90	218	17616	394	458	301590	21734	258	84251	12



SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantity and Value of all Fish, &amp;c., in the Province of Ontario—Continued.

Number.	DISTRICTS.	KINDS OF FISH.											TOTAL VALUE.	Number.	
		Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel or Dore, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.			Caviare, lbs.
1	Pelée Island . . . . .	207750	14225	.....	310	5195	33205	10767	23400	.....	5025	1255	1090	8,924 37 1	1
2	County of Essex . . . . .	547244	57406	.....	.....	52108	227407	19136	143886	.....	18353	95900	1500	35,738 84 2	2
3	" Kent . . . . .	2791094	38669	.....	11000	249263	422334	22571	135733	.....	852	80290	2257	97,329 50 3	3
4	" Elgin . . . . .	1848865	83308	20	12231	542852	.....	18936	94651	.....	5205	61994	1893	78,031 19 4	4
5	Houghton and Long Point . . . . .	220532	59688	274	160	64712	66018	15146	37910	.....	195	6259	1514	18,034 34 5	5
6	Port Rowan Bay . . . . .	.....	.....	.....	7187	22804	28038	.....	100267	712	12526	139560	.....	8,929 13 6	6
7	Normandale . . . . .	42425	.....	.....	853	17253	2374	.....	18049	.....	4215	14400	.....	2,788 12 7	7
8	East of Port Dover . . . . .	263503	72966	1523	4069	151797	1413	21941	69235	.....	69	71230	2192	25,147 02 8	8
9	Cayuga to and including Grand River . . . . .	406059	54929	100	1838	82075	135	12146	47456	.....	1127	70204	1214	20,967 75 9	9
10	Port Maitland to Port Colborne . . . . .	190832	19729	.....	.....	27179	.....	.....	21182	.....	.....	2195	.....	7,433 27 10	10
11	" Colborne to Niagara Falls . . . . .	7429	505	149	.....	2933	40960	48382	2970	.....	337	16481	4838	7,736 31 11	11
	Totals . . . . .	6525733	401425	2066	37648	1218171	821884	169025	694739	712	47904	559768	16498	.....	.....
	Values . . . . .	130515	32114	206	3012	60909	32875	10141	20842	43	958	11195	8249	311,059 84	.....

RETURN of the Number and Value of Tugs and Boats, and the Quantity and Value of Fish, &c., in the Province of Ontario—*Con.*

FISHING MATERIAL.														
Tugs or Vessels.				Boats.			Gill Nets.			Hoop Nets.				
Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Value.			
DISTRICTS.														
Lake Ontario.														
1	Queenston.....			3	15	3	25	27600	1639			1		
2	Niagara.....			15	580	24	5	26200	840			2		
3	Port Dalhousie.....	2	4000	8	3	190	5	3	2500	100	2	3		
4	Louth.....			12	160	15	3	7500	250			4		
5	Clinton.....			6	350	12	8	13500	460			5		
6	Grimsby ..			3	300	6	13	46000	2300			6		
7	Burlington Beach.....			17	1060	31	45	84000	6000			7		
8	County of Halton.....			15	1600	40	700	8000	185			8		
9	" Peel.....			3	275	7	8	44000	3395			9		
10	" York.....			14	1975	23	45	5930	210			10		
11	" Ontario.....			4	175	7	6	138000	4700			11		
12	" Durham and Northumberland.....			20	575	32	104			22	283	12		
13	Rice Lake and Trent River.....			30	392	46				91	1911	13		
14	County of Prince Edward.....	1	600	3	32	1650	42	33	20500	1200	10	14		
15	Bay of Quinte.....	3	1700	10	35	300	70	20	18030	1060	70	15		
16	Lennox County and Napanee River.....			17	283	40	5	5400	108	44	572	16		
17	Antwerp Island and vicinity.....			21	532	35	13	12650	634	5	125	17		
18	Wolfe Island and vicinity.....			16	333	25	30	3000	300	39	665	18		
Totals.....				6	62	6300	21	266	10745	463	1083	23381	283	4369

## SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantity and Value of all Fish, &amp;c., in the Province of Ontario—Continued.

DISTRICTS.		KINDS OF FISH.													TOTAL VALUE.	Number.	
Number.		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel or Dore, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Belts, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	% cts.	Number.
<i>Lake Ontario.</i>																	
1	Queenston . . . . .		54000	27900			15500			6850	680	6300		1770	685	35 40	1
2	Niagara . . . . .		27680	120			1600				69	1561		120		5,070 30	2
3	Port Dalhousie. . . . .											4000		2800		686 77	3
4	Louth. . . . .		700									1600		300	25	190 00	4
5	Clinton . . . . .	4	14620	600	23003					250						437 90	5
6	Grimshy . . . . .		142340							400		450		15433	40	5,153 16	6
7	Burlington Beach . . . . .		123331	26650	5530			200			300	950	900	13000		5,517 78	7
8	County of Halton . . . . .		544000	400	3200	750		250			630	700	350	2100		11,624 50	8
9	" Peel . . . . .		1300	330	6950	3350		250								1,133 20	9
10	" York . . . . .		141000	4636	4800	20		1500				2700		6500		3,943 48	10
11	" Ontario . . . . .		23800	300			40		27		4	68				505 38	11
12	" Durham and Northumberland . . . . .		12250	7550	3960			20850			1175	13000	4900	7600		2,789 50	12
13	" Rice Lake and Trent River . . . . .					900		4203	3500	26	640	4593	94946	33587		3,198 53	13
14	County of Prince Edward . . . . .			15640	10426	450	630	18900		2000	5890	62480	28900	514400	200	16,439 48	14
15	Bay of Quinte . . . . .		419	16000			12500	125429			27163	107565	73169	102340		15,389 07	15
16	Lennox County and Napanee River . . . . .	3	5000				900	32246			23000	4500	35200	10150		2,719 34	16
17	Amherst Island and vicinity . . . . .		2025	1900						1000		59300	2200			5,262 50	17
18	Wolfe Island and vicinity. . . . .		1700	26500	2215		3100	16625	1500	8290	2100	13904	27246	4700	829	2,681 94	18
	Totals . . . . .	7	1094475	129126	60084	5470	34270	232330	5000	18816	40951	283671	267812	722300	1779		
	Values . . . . .	28	21889	10330	6008	438	1714	9293	300	1129	2457	8510	5356	14446	889		82,788 17

RETURN of the Number and Value of Tugs and Boats, and the Quantity and Value of Fish, &c., in the Province of Ontario—*Con.*

Number.	DISTRICTS.										FISHING MATERIALS.					KINDS OF FISH.				Number.	
	Tugs or Vessels.					Boats.			Gill Nets.		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.							
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.											
1	Frontenac County.....																				
2	Leeds County.....																				
3	Grenville, Dundas, Stormont and Glengarry Counties.																				
4	Prescott, Russell and Carleton Counties.....																				
5	Renfrew County.....																				
6	Nipissing District.....																				
7	Peterborough County.....																				
8	Lake Scougog and Victoria County.....																				
9	" Simcoe and tributaries.....																				
10	Muskoka District, Grey and Wellington Counties.....																				
	Totals.....	3	12	2000			36		147	2368	181	150	26981	1553		1	34241	23109	59157		
	Values.....															4	685	1849	5916		



## SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantity and Value of all Fish, &amp;c., in the Province of Ontario—Continued.

Number.	DISTRICTS.	KINDS OF FISH.								TOTAL VALUE.		Number.
		Pass, lbs.	Pickarel or Dore, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	
1	Frontenac County.....	6000	9360	42861	123	1526	100	4789	45065	69359	.....	1
2	Leeds County.....	4667	.....	9351	635	239531	513	991	40001	48902	152	2
3	Grenville, Dundas, Stormont and Glengarry Counties.....	870	1470	1100	25	632	4	.....	622	3000	2130	3
4	Prescott, Russell and Carleton Counties.....	55	5025	2520	25	632	36	875	3743	9860	39	4
5	Renfrew County.....	14	.....	651½	.....	2700	.....	210	.....	860	270	5
6	Nipissing District.....	.....	4009	3068	110	164036	.....	154	.....	2747	15144	6
7	Peterborough County.....	52000	35500	.....	62500	.....	800	1500	2000	18000	.....	7
8	Lake Scagoo and Victoria County.....	193750	200	160	317050	.....	1086	80420	17510	22840	.....	8
9	" " Surcoe and tributaries.....	70200	14550	.....	16800	.....	.....	.....	4950	45000	.....	9
10	Muskoka District, Grey and Wellington Counties.....	.....	732	.....	.....	.....	.....	.....	.....	1042	.....	10
	Totals.....	327556	70846	59711½	397243	192247½	2539	88939	113891	221610	17735	.....
	Values.....	26204	3542	2388	23834	11535	152	2668	2278	4432	8867	94,355 94

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## RECAPITULATION of the number of fisher men, tonnage and value of tugs, vessels

Number.	DISTRICTS.	FISHING									
		Tugs or Vessels.				Boats.			Gill-nets.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.
				\$		\$				\$	
1	Lake of the Woods and Rainy River District.....	6	62	4,250	13	21	1,365	23	28	28,200	2,545
2	Lake Nepigon and Thunder Bay District.....					150	750	75			
3	Lake Superior.....	12	115	24,000	42	71	4,910	132	440	639,600	28,255
4	Lake Huron (North Channel).....	22	215	89,839	95	109	11,250	196	681	677,500	51,295
5	Georgian Bay.....	17	246	50,200	81	114	7,750	223	1,559	838,900	86,512
6	Lake Huron (proper).....	7	161	19,700	42	96	6,476	174	413	810,430	25,445
7	River St. Clair.....					11	234	27	*2		10
8	Thames River.....					22	274	93	*21		105
9	Lake St. Clair and Detroit River.....					59	2,479	101	*2		10
10	Lake Erie and Grand River..	18	466	56,300	90	218	17,616	394	{ *71 458	301,590	21,734
11	Lake Ontario.....	6	62	6,300	21	269	10,845	463	1,083	462,810	23,381
12	Frontenac County.....					69	596	70	11	5,800	607
13	Leeds County.....					32	311	51	5	600	52
14	Grenville, Dundas, Stormont and Glengarry Counties....					4	48	6			
15	Prescott, Russell and Carleton Counties.....					12	500	13	4	900	90
16	Renfrew County.....					16	105	15	20	681	116
17	Nipissing District.....	3	12	2,000	36	12	750	24	108	18,000	648
18	Peterborough County.....										
19	Lake Scugog and Victoria County.....										
20	Lake Simcoe and Tributaries.....										
21	Muskoka District, Grey and Wellington Counties.....					2	58	2	2	1,000	40
	Totals.....	91	1,339	252,589	420	1,187	66,317	2,082	4,812	3,786,011	240,720

\*Dip nets.

†Canoes.

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and boats, the quantity and value of all fishing materials for the year 1901.

MATERIAL.									OTHER FIXTURES USED IN FISHING.				
Seines.			Pound-nets.		Hoop-nets.		Night lines.		Freezers and ice-houses.		Piers and wharfs.		Number.
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number of hooks.	Value.	Number.	Value.	Number.	Value.	
		\$		\$		\$ cts.		\$ cts.		\$		\$	
.....	.....	.....	30	3,500	.....	.....	.....	.....	5	4,500	3	2,500	1
.....	.....	.....	37	45,425	.....	.....	.....	.....	8	2,660	2	1,000	2
.....	.....	.....	72	13,950	.....	.....	.....	.....	3	400	5	750	3
.....	.....	.....	.....	.....	6	150 00	1,500	15 00	16	1,945	11	950	4
4	1,425	615	63	12,450	.....	.....	.....	.....	18	2,540	.....	.....	5
10	799	540	.....	.....	.....	.....	.....	.....	2	280	2	10	6
24	1,703	787	.....	.....	.....	.....	.....	.....	.....	.....	21	40	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
18	1,879	1,440	11	1,925	70	2,911 00	18,000	180 00	.....	.....	2	10	9
28	7,700	2,049	258	84,251	3	200 00	10,900	768 00	79	22,240	3	1,800	10
11	3,635	965	‡	.....	283	4,369 00	2,950	33 50	61	5,989	.....	950	11
.....	.....	.....	.....	.....	67	1,143 00	75	2 00	1	15	.....	.....	12
.....	.....	.....	.....	.....	63	1,236 00	950	9 50	.....	.....	.....	.....	13
.....	.....	.....	.....	.....	.....	.....	5,700	73 00	.....	.....	.....	.....	14
.....	.....	.....	.....	.....	*1	0 50	1,720	17 00	3	85	.....	.....	15
.....	.....	.....	.....	.....	5	100 00	600	12 00	.....	.....	.....	.....	16
.....	.....	.....	.....	.....	.....	.....	7,500	75 00	3	900	.....	.....	17
.....	.....	.....	.....	.....	2	20 00	.....	.....	.....	.....	.....	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
95	17,141	6,396	471	161,501	499	10,129 00	49,895	1,185 00	199	41,554	49	8,010	

‡3 Fishing Machines and 61 Spears.

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## RECAPITULATION by Districts of the kinds and

Number.	District.	Herring, salted. brls.	Herring, fresh. lbs.	Whitefish, fresh. lbs.	Whitefish, c. brls.	Trout, fresh. lbs.	Trout, salted. brls.	Bass. lbs.	Pickarel or Doré. lbs.
1	Lake of the Woods and Rainy River District.			117,576		17,918			75,580
2	Lake Nepigon and Thunder Bay District.			300		15,200		50	2,000
3	Lake Superior.		89,000	461,546		1,331,703	251		40,306
4	Lake Huron (North Channel).	225½		1,228,921		1,584,748		75	496,666
5	Georgian Bay.	426½	30,764	274,180	134½	1,222,485	531½		194,039
6	Lake Huron (proper).	371½	187,583	26,154	6½	866,632	803		281,551
7	River St. Clair.		3,500						113,247
8	Thames River.								34,064
9	Lake St. Clair and Detroit River.		6,442	20,721				3,913	44,878
10	Lake Erie and Grand River.		6,525,733	401,425		2,066		37,648	1,218,171
11	Lake Ontario.	7	1,094,475	129,126		60,084		5,470	34,270
12	Frontenac County.	1	7,188			8,300		6,000	9,360
13	Leeds County.		150			8,020		4,667	
14	Grenville, Dundas, Stormont and Glengarry Counties.							870	1,470
15	Prescott, Russell and Carleton Counties.							55	5,025
16	Renfrew County.			2		51		14	
17	Nipissing District.		9,587	6,153					4,009
18	Peterborough County.					3,000		52,000	35,500
19	Lake Scugog and Victoria County.		1,000	800		14,320		193,750	200
20	Lake Simcoe and Tributaries.		15,000	15,600		24,300		70,200	14,550
21	Muskoka District, Grey and Wellington Counties.		1,316	554		1,166			732
	Totals.	1,031½	7,971,738	2,683,058	141	5,159,993	1,585½	374,712	2,605,618
	Values.	\$ 4,126	159,435	214,645	1,410	515,999	15,855	29,977	130,281



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quantities of Fish caught during the Year 1900.

Pike.	Maskinonge.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Sturgeon.	Caviare.	Value.	Number.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	\$ cts.	
42,319	15	.....	.....	4,662	72,835	11,415	52,334	*6,773	25,269 80	1
4,000	.....	.....	.....	.....	.....	.....	.....	.....	1,808 00	2
5,824	.....	.....	.....	.....	.....	853	13,279	1,327	178,109 54	3
71,518	140	.....	600	.....	12,538	15,600	130,098	12,948	300,259 54	4
29,340	.....	.....	3,700	.....	.....	22,975	45,906	8,176	171,452 59	5
.....	.....	.....	17,665	.....	3,545	27,700	147,849	14,862	133,622 52	6
300	.....	.....	700	.....	200	10,872	33,250	3,325	9,644 29	7
3,076	.....	.....	200	1,000	2,181	82,974	25	.....	3,596 84	8
15,536	3,428	.....	19,903	10,500	49,203	293,652	73,383	7,338	21,326 75	9
821,884	.....	.....	694,739	712	47,904	559,768	169,025	16,498	311,059 84	10
252,330	5,000	40,951	283,671	.....	267,812	722,300	18,816	1,779	82,788 17	11
42,861	.....	100	4,789	.....	45,065	69,359	.....	.....	6,078 35	12
9,351	123	513	991	.....	40,001	48,902	1,526	152	3,565 91	13
1,100	635	4	.....	.....	622	3,000	23,353	2,130	2,764 09	14
2,520	25	36	875	.....	3,743	9,860	632	39	715 84	15
651	.....	.....	210	.....	.....	860	2,700	270	352 94	16
3,068	110	.....	154	.....	.....	2,747	164,036	15,144	18,487 47	17
.....	62,500	800	1,500	.....	2,000	18,000	.....	.....	10,478 00	18
160	317,050	1,086	80,420	.....	17,510	22,840	.....	.....	39,340 16	19
.....	16,800	.....	.....	.....	4,950	45,000	.....	.....	12,328 50	20
.....	.....	.....	.....	.....	.....	1,042	.....	.....	244 68	21
1,285,838	405,826	43,490	1,110,117	16,874	570,109	1,969,719	876,212	90,761	.....	.....
51,434	24,349	2,609	33,304	1,012	11,402	39,394	52,573	45,380	1,333,293	82

\* 135 Sturgeon bladders.

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## STATEMENT

Of the yield and value of the Fisheries of the Province for the year 1900.

Kind of Fish.	Quantity.	Price.		Value.	
		\$ cts.		\$ cts.	
Whitefish.....	bbls. 141	10	00	1,410	00
".....	lbs. 2,683,058	0	08	214,644	64
Herring.....	lbs. 7,971,738	0	02	159,434	76
".....	bbls. 1,031 $\frac{1}{2}$	4	00	4,126	00
Trout.....	" 1,585 $\frac{1}{2}$	10	00	15,855	00
".....	lbs. 5,159,993	0	10	515,999	30
Bass.....	" 374,712	0	08	29,976	96
Pickarel.....	" 2,605,618	0	05	130,280	90
Pike.....	" 1,285,838 $\frac{1}{2}$	0	04	51,433	54
Maskinonge.....	" 405,826	0	06	24,349	56
Sturgeon.....	" 876,212 $\frac{1}{2}$	0	06	52,572	75
Caviare.....	" 90,761	0	50	45,380	50
Bladders.....	" 135	0	80	108	00
Eels.....	" 43,490	0	06	2,609	40
Perch.....	" 1,110,117	0	03	33,303	51
Catfish.....	" 570,109	0	02	11,402	18
Coarse fish.....	" 1,969,719	0	02	39,394	38
Tullibee.....	" 16,874	0	06	1,012	44
Total.....				\$1,333,293	82

## RECAPITULATION

Of all fishing tugs, boats and nets, &amp;c., employed in the Province for the year 1900.

Articles.	Value.
91 tugs, 1,339 tonnage (420 men).....	\$ 252,589
1,187 boats (2,082 men).....	66,317
3,786,011 yards gill-nets number 4,812.....	240,720
95 seines, 17,141 yards.....	6,396
471 pound nets.....	161,501
499 hoop nets.....	10,129
97 dip nets.....	535
49,895 hooks on set lines.....	1,185
199 freezers and ice houses.....	41,554
49 piers and wharfs.....	8,010
3 machines.....	45
61 spears.....	61
Total.....	\$789,042

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## APPENDIX No. 7.

## MANITOBA.

REPORT ON THE FISHERIES OF MANITOBA BY INSPECTOR  
W. S. YOUNG, FOR THE YEAR 1900.

SELKIRK, Sept. 13, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

I have the honour to submit the following table of statistics showing the yield and value of the fisheries, the number of fishermen, boats, nets, &c., and the quantity and value of fish caught in the lakes of the province of Manitoba for the year 1900.

As I was only recently appointed to the position of inspector, my facilities in these few months for a comprehensive view of the industry have been limited.

As will be found by comparison with the report of my predecessor for the previous year, there is a considerable increase in the quantity and value of fish caught during last year. It is true there is also an increase in the number of boats, nets, &c., and a consequent increase in the tonnage of fishing tugs.

There were no heavy losses and the season's operations as a whole were very successful and profitable, both to the fishermen employed and the companies engaged in this important industry. The fish seem to have been more plentiful than usual.

I have the honour to be, sir,  
Your obedient servant.

W. S. YOUNG,  
*Inspector of Fisheries.*

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Overseer A. J. McPherson, Dauphin, Manitoba, reports as follows on the fisheries of Lake Winnipegosis and the west side of Lake Manitoba :

*Lake Winnipegosis*.—This season's catch on an average has been a good one, and fish have been on the market in good condition. There has been very little waste fish on the fishing grounds. This is accounted for by the better class of boats that has been put on these lakes, and one new 'steamer' that was put this year on Lake Winnipegosis which alone is capable of handling two cars of fish each trip without towing any barges. The markets have been good throughout the season. Prices ranging from one and a half to four and a half cents per pound were paid by the buyers for whitefish. Coarse fish was also in better demand this season than they have ever been before. On these lakes, 'suckers' have been bought up by the buyers and shipped out, which has a good effect on the fishing grounds, as it has a tendency to keep the water clean of dead fish and fishermen will get their coarse fish off the ice, which has always been a source of trouble to them, and has been the cause of spoiling some of the best fishing grounds on these lakes.

Pickarel and pike realized good prices this season, and were very plentiful in the southern end of the lake, and most of the fishermen do their winter fishing for them, which, I am of the opinion, is the best thing that can be done for this lake, as it gives whitefish a better chance. The latter fish are improving in this lake every year.

A great many fishermen are of the opinion that the department ought to put in some fry in this lake in return for the ova that was taken out for two years for the Selkirk hatchery. By keeping the Dominion Bay closed for a breeding ground, and by carefully looking after this lake, there is no danger of depleting it for years to come.

*Lake Manitoba*.—The fishing has improved in this lake for the last two years. The reason for this, as explained by the fishermen, is that it has been kept cleaner of dead fish, sawdust and rubbish by the removal of the saw-mill near the River Fairford. It is very important that the rivers running from one lake to another should be clean and free from dead fish and offal. Two new ice-houses were erected at the south end of the lake this year, and it will require a little better looking after next year as fishing will be more active.







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## APPENDIX No. 8.

### NORTH-WEST TERRITORIES.

QU'APPELLE, N.W.T., January 2, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit the following report on the fisheries of the North-west Territories for the year 1900.

The rainfall during the year was again above the average and was exceptionally heavy in the northern Alberta and Saskatchewan districts. This has had an excellent effect on the lakes and rivers, though the disturbance of the fishery grounds made the fishing more precarious during a portion of the year. A great many of the smaller lakes materially raised their water levels and many where fish had become extinct, owing to the low water, have been restocked. In both spring and fall spawning was much earlier than usual owing to the peculiar season. About eight millions of whitefish fry were procured from the Selkirk hatchery and placed in the Qu'Appelle, Crooked and Round lakes.

The regulations have been well observed in general and the advantages of close seasons are now fairly well comprehended. There were thirteen convictions in Assiniboia for illegal fishing, but in no instance was the culprit a licensed fisherman. In Alberta the high water prevented in a great degree the illegal taking of fish by traps in the streams and the infractions on the lakes were but trivial.

The Saskatchewan valley fisheries were much interfered with by the heavy floods which prevailed throughout the summer. A phenomenal abundance of muskrats, however, absorbed the energies of those who usually resort to the fishery for their livelihood and has prevented the hardships which would probably otherwise have followed.

The Cedar Lake sturgeon fishery was opened in the winter months only. The results of this course have been satisfactory, the fear of depletion being removed and profitable employment afforded to the resident Indian and half-breed fishermen, to whom only licenses are issued, during the hardest season of the year.

The winter fishery in the Edmonton District was very good, but during the summer the heavy rains, coupled with the issue of half-breed scrip, considerably lessened the amount of fishing done in that season. The rapidly increasing settlement of this section will necessitate the employment of more local guardians in the near future.

The only export business in fish from the North-west Territories this year has been carried on at Lake Winnipegosis. Attention has been called to this district by the Canadian Northern Railway and the early catches in these almost virgin waters attracted many fishermen to the lake from other points. Under the supervision of a special overseer a most successful fishery has been made, the number of licenses issued being carefully regulated and due preference given to the older settlers and permanent residents.

#### LONG LAKE.

*Overseer Foster* reports a smaller catch than for some years, attributed to the number of men engaging in the fishery being considerably less. Eleven licenses and four free permits to needy Indians were issued. The fish were very plentiful and in excellent condition and no sickness amongst them was reported throughout the year. On account of the small catch prices were high. Fish not disposed of in the immediate vicinity were marketed at Regina and Moosejaw. Little fishing was done except in the winter season. Two nets were seized and two men fined for illegal fishing. The lake maintained the level gained in the previous year and the supply of fish is apparently increasing.

## QU'APPELLE LAKES.

*Guardian Leader* reports a full catch of pike, pickerel, tullibee and coarse fish but a diminution in that of whitefish. Few of the fishermen are supplied with suitable boats for reaching the grounds to which the whitefish resort in summer. The destruction of spring spawning fish in the creeks was much less this year than in former years, owing to the spring freshet coming very early. The whitefish taken were mostly of small size but many of the tullibee weighed as high as four pounds. No difficulty is experienced by the fishermen in disposing of their catches, the balance not consumed at home being readily marketed at the neighbouring towns. Two persons were fined for fishing in the close season, but the regulations were well observed by the regular fishermen both white and Indian. The dam and fishway at Katepwe have been maintained in good condition, but require considerable watching during the run of fish to prevent their abuse as fish-traps. About six millions of whitefish fry from the Selkirk hatchery were placed in these lakes in the spring, from which good results are looked for later on.

## CROOKED AND ROUND LAKES.

*Guardian Fitzgerald* reports these lakes to be in excellent condition as regards the state of water, the heavy rains in the fall having had good results. Good catches of pike and pickerel were made, the hook and line fishery by the Indians being specially successful. The amount of whitefish caught remains, however, only nominal. An attempt at restocking the lakes with fry from Selkirk was made this spring, but unfortunately the shipment did not stand the long journey well and only a small percentage was placed in the lake in a healthy state. Two illegal nets were seized and six persons were successfully prosecuted for constructing fish traps on the river. The construction of a good dam at the outlet of Round Lake has been pressed on the attention of the North-west Government, and if made would much help the fishery.

## MOOSE MOUNTAIN LAKES.

The appointment of *Guardian Powell* in this district has had a very beneficial effect in preventing the illegal netting done in the previous seasons. Two persons were fined for this offence. These lakes are much resorted to by summer visitors and excellent sport is afforded by the pickerel, about 3,000 of which were taken by hook and line.

## EDMONTON DISTRICT.

*Overseer Harrison Young* reports that the lakes in his district are as a whole in a satisfactory condition. The issue of scrip to the half-breeds has materially lessened the amount of fishing done by them, and the exceptionally heavy rains have had a good effect in raising the level of the water thus permitting fish to pass freely from previously isolated lakes. There have been but few infractions of the regulations by the resident fishermen; nets were seized in five instances, but no prosecutions were instituted. At *Lake La Biche*, fish were very plentiful and much larger than last year. The half-breeds resident round this lake caught all the fish they wanted during the summer months, and did not have to set more than one net per family to do so. They all now appreciate the value of a close season. At *Lake St. Anne's* there has been a great rise in the water level, the fish have left their former feeding places and the fishermen had difficulty in locating the new grounds. The visit of the scrip commissioners prevented much fishing being done in December here. Fish are reported as plentiful as ever at *White Whale Lake*, but for some reason are of very poor quality this year, watery and tasteless. *Lake la Nonne* has not hitherto been much resorted to, but a settlement of half-breeds has recently been made and a guardian during the close season will be required next year. *Pigeon Lake* still continues to hold its own, and the quality of the fish is excellent. Very high water has had the same effect as at *St. Anne's* in altering the fishing places. Exceedingly bad



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roads due to heavy rains interfered with the summer marketing of fish so that few men were fishing through the summer, but the winter catch was good. With regard to coarse fish in the many creeks and small lakes in this district, the low water of previous seasons had caused considerable scarcity, advantage having been taken to take the fish by traps. This year, all streams were filled bank high and could not easily be shut up and the destruction of fish was not large. The evil is, however, a growing one, and with the increasing settlement of the country must be coped with by the appointment of local guardians.

## BATTLEFORD.

*Guardian Gagné* reports that his efforts to prevent the placing of dams and traps in the Battle River have had a good effect this year, and the damage done by such illegal practices has been trifling. The catch at Jackfish Lake was good and its whitefish seem to be increasing in quantity and improving in quality. Turtle Lake was not much resorted to this season, and fish are reported still scarce there. Considerable fishing was done at Cold Lake, where the whitefish are exceptionally fine.

## PRINCE ALBERT.

*Overseer Robertson* reports having visited all the important points in his district during the year and that the regulations were well observed. The Saskatchewan River fisheries are operated during the summer low water, this year, the river was in flood so continued, that the catch was extremely small.

The Green Lake fishery was also a failure, the whitefish being observed to leave the lake in shoals early in September, though its waters were in excellent condition and some three feet higher than in the previous year. Most of the residents went to Dog Lake for the winter fishery, where a full supply was forthcoming. At *Isle la Crosse* and *Lake le Rouge* the supply of fish is still amply sufficient for local needs though the consumption of fish is very large. No fishing was done by the Indians at Fort la Corne owing to the high stage of the river. At Crooked Lakes there is a good supply of pike, pickerel, and mullet and the surrounding district being now well settled, a good deal of angling is done.

Red Deer, Trout, and Candle Lakes are without doubt the most important and available lakes in the district for fishing to be carried on for other than purely local needs. The season, however, is regarded as opening too late as now fixed, for the carrying on of a profitable industry though the prospect of the opening up of a shorter route to market is likely to lead to the formation of a local company to engage in the business if an earlier opening of the fishery is conceded.

## GRAND RAPIDS.

*Overseer McKay* reports that the Cedar Lake fisheries have been kept under careful supervision during the year no fishing for sturgeon was allowed throughout the summer and the regular fishermen were then mostly employed in the Lake Winnipeg fishery. Licenses for the winter fishery were confined strictly to residents, half-breeds and Indians. No fish were marketed from this district except sturgeon, which were bought by the Dominion Fish Co., at Grand Rapids. The overseer reports that fish of all kinds are as plentiful as ever and that there is no need to fear the depletion of the waters under present conditions. The great abundance of muskrats in the lower Saskatchewan Valley has much diminished the amount of fishing done during the year by the native population. There were rumours from time to time of fishing being done by outside unlicensed fishermen, but careful investigations showed these to be unfounded.

I have the honour to be, sir,

Your obedient servant,

ERNEST W. MILLER,

*Inspector of Fisheries.*

## NORTH-WEST TERRITORIES.

RETURN of the Number of Fishermen, Boats, Nets, &c., and the Quantity and Value of Fish caught in the **North-west Territories** for the Year 1900.

District.	FISHING MATERIAL.						KINDS OF FISH.						TOTAL VALUE.	Number.	
	Boats.			Gill Nets.			Whitefish, lbs.	Trout, lbs.	Pickereel, lbs.	Pike, lbs.	Sturgeon, lbs.	Tulibee.			Mixed and coarse fish, lbs.
	Number.	Value.	Men.	Number.	Fathoms.	Value.									
		\$				\$								%	cts.
1 Qu'Appelle.....	50	800	75	200	4500	900	28000	35000	80000	65000	57000	85000		6,940	00 1
2 Macleod.....	20	500	20	20	500	100	1000	35000	5000	5000	5000	5000		1,950	00 2
3 Edmonton.....	130	1125	250	550	16500	2750	378000	38000	75000	38000	20000	40000		22,340	00 3
4 Battleford.....	20	200	50	100	3000	500	47000	8000	15000	8000	4000	10000		3,190	00 4
5 Prince Albert.....	93	980	200	400	12000	2500	198000	25000	43000	51000	2000	50000		14,140	00 5
6 Grand Rapids.....	40	400	100	250	7500	1000	180000	10000	150000	15000	25000	180000		17,350	00 6
7 Northern Districts.....							3000000	100000	750000	500000	50000	1000000		196,500	00 7
Totals.....	353	3955	695	1520	44000	7750	3832000	170000	1118000	677000	152000	1370000			
Values.....							191600	8500	22360	20310	2900	3040		262,410	00

## SESSIONAL PAPER No. 22

## RECAPITULATION

OF the Yield and Value of the Fisheries of **Manitoba** and the **North-west Territories**, for the Year 1900.

Kinds of Fish.	Rate.	Quantity.	Value.
	\$ cts.		\$
Whitefish, salted..... Lbs.	0 05	28,800	1,440
" fresh..... "	0 05	9,675,600	483,780
Trout..... "	0 05	170,000	8,500
Pickarel..... "	0 03	2,952,100	88,563
Pike..... "	0 02	1,562,300	31,246
Sturgeon..... "		1,039,500	61,790
" caviare..... "	0 50	17,500	8,750
Perch..... "	0 02	48,000	960
Tullibee..... "	0 02	356,200	7,124
Catfish..... "	0 03	184,400	5,532
Goldeyes..... "	0 01	7,200	72
Coarse and mixed fish..... "	0 01	1,611,400	16,114
Home consumption (not itemized). .. "	0 01	428,800	4,288
Total for 1900.....			718,159
" 1899.....			622,911
Increase.....			95,248

## RECAPITULATION

OF the Number of Fishing Tugs, Boats, Nets, &c., used in **Manitoba** and the **North-west Territories**, for the Year 1900.

Articles.	Value.
	\$
22 Fishing tugs (1,523 tons).....	128,100
571 " boats.....	21,065
1720 gill-nets (153,200 fathoms).....	22,620
192 fathoms of seines.....	180
2 pound-nets.....	300
106 freezers and ice houses.....	118,400
38 piers and wharfs.....	10,615
Total.....	301,280

APPENDIX No. 9.

BRITISH COLUMBIA.

ANNUAL REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR  
THE YEAR 1900, BY INSPECTOR C. B. SWORD.

NEW WESTMINSTER, B.C., February 7, 1901.

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to inclose statistical report of the fisheries of British Columbia for the year 1900, also returns of the packs of the various salmon canneries, as well as the report of the fur-sealing catch.

SALMON.

On the Fraser River this year the run of sockeye salmon (*O. Nerka*) was the poorest known for several years, the pack only amounting to 170,889 cases, as against 486,409 cases in 1899, and about 240,000 cases in 1898. On Puget Sound where the packers depend almost wholly on Fraser River fish for their sockeye pack, the estimate for this season is 228,704 cases, as against 497,700 cases in 1899, and 244,000 cases in 1898.

The estimated pack for Puget Sound for this season is given as

Sockeyes.....	228,704	cases.
Red Spring.....	29,983	"
Cohoes.....	118,174	"
Humpbacks ( <i>O. Gorbusche</i> ).....	"	"
Chums ( <i>i.e. Qualo</i> ) or dog-salmon ( <i>O. Keta</i> ).....	55,170	"
	432,031	"

less than one half of last year's pack.

Of the total pack for British Columbia, 606,530 cases, there were,

Sockeye.....	413,802	cases.
Spring.....	17,125	"
Cohoes.....	43,484	"
Humpbacks.....	12,267	"
Dog-salmon.....	119,852	"

All the humpbacks (*O. Gorbuscha*) and dog-salmon (*O. Keta*) canned were packed in the Fraser River district, these, with cohoes raising the returns for that district to 331,361 cases.

In addition to the small run of sockeyes, the pack suffered to some extent from the labour troubles in the early part of the season, a strike among the fishermen preventing any fishing being done for about two weeks.

Judging from the catches in the traps on the United States side of the line during these two weeks, the loss to the pack for the year could not have been very large, while there can be no doubt that a much larger number of fish were enabled to reach the



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spawning grounds than would otherwise have done, a result which in such a season as last, must be regarded as a considerable set-off against the loss caused by the strike.

The northern fisheries do not seem to have suffered from a deficiency in the run of salmon, the returns showing as follows :

	1900.	1899.	1898.
Skeena River .....	135,424*	122,903	105,362
Rivers Inlet. ....	91,587	83,628	90,440
Naas River .....	20,200	19,442	20,000

The value of the canned salmon is estimated on the same basis, \$4.80 per case as in the previous year. This is less than the price at which sockeye salmon sold this year, but as the total returns include 193,046 cases of other salmon which were sold at lower rates, the total may be taken as fairly accurate.

The shipment of salmon salted in barrels shows an increase to 4,750 barrels, as against 3,450 in 1899.

Shipments of dry salted qualo or dog salmon (O. Keta) amounted this year to 5,700,000 pounds, as against 3,000,000 pounds in 1899, and 4,000,000 pounds in 1898. Taking into account the large number of these salmon, 6,340,000 pounds, put up in cans, in addition to those dry salted, we have a very gratifying addition to our fishing returns, when we consider that up to 1898 these fish were, with the exception of those consumed by the Indians, thrown away as worthless.

The amount of salmon shipped in a frozen condition (included under the heading 'fresh') shows 550,000 pounds, as against 800,000 pounds in 1899. This decrease is accounted for by the small catch on the Fraser river, a new company on the Skeena being credited with shipments to the amount of 100,000.

Notwithstanding the decrease last year, there is every reason to expect a large development in the immediate future in the business of shipping fresh salmon in a frozen or chilled condition. The competition for salmon among the packers was very keen, and a very large number of applications for permission to use seines at various points were made to the department.

Five applications for license to use seines in the Straits of San Juan de Fuca, on the south-west coast of Vancouver Island, were granted, the applicants expecting to be able thus to intercept the schools before they reached the traps on the United States side of the line. From the nature of the locality, and to give every opportunity to fairly test the suitability of this seining ground, these licensees were allowed to use seines 200 fathoms long, being double the regular length. Only two of the licensees utilized the permission granted, the result being a complete failure. It would appear that while in some years the schools pass close enough to the shore to be taken with the drag seine, this is by no means uniformly the case, and the runs this year were so poor that it is doubtful whether, even had the fish come close in, the seines could have been profitably operated. Of course, under different conditions, it is quite likely that the experience of this season might be reversed.

The demand for dog salmon, or qualo, occasioned the shipment of a considerable quantity of this fish, dry salted, from the Queen Charlotte Islands, and there is every probability that in the coming season, not only these outlying islands, but many inlets and streams hitherto untouched on all parts of the coast will be fished, to supply the constantly growing demand.

The two fishery cruisers which it is proposed to build will be fully employed, and a large increase in the staff of guardians will also be required.

## STURGEON.

The falling off in the catch of sturgeon still continues, the returns showing only 105,000 pounds, as against 268,500 pounds in 1899. There were only 23 licenses taken out last year, against 88 in 1899, and 164 in 1898.

NOTE.—This increase in the pack of canned salmon at Skeena river is in addition to the increase of 1,000 barrels salted and 100,000 pounds frozen salmon shown in the returns from that locality.

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A few illegal lines were seized and I have reason to believe that some of these are still being used, the scarcity of sturgeon has, however, had most to do with the decrease in their use.

## HALIBUT.

The total of the halibut catch this year, 4,261,000 lbs., shows a very satisfactory increase. The catch of the New England Company, the largest dealers in this fish, being 50 per cent above their capture in 1899. This company operates mainly on the banks of Queen Charlotte Islands and it is probable that during the coming season we may have again to record a large increase in the catch as the market for this fish is improving and other firms are likely to go into the business on a large scale.

## GUANO, &amp;c.

The returns show a smaller amount of guano (200 tons) made in 1900 than in 1899 (550 tons). This is accounted for by the smaller catch of salmon on the Fraser River and the consequently smaller supply of offal for the oil factory. The same cause accounts for the smaller return (128,100 galls.) of fish oil in 1900 (the amount in 1899 being 145,200 galls.). The decrease from this cause in the latter article was, however, partially made up from other sources, dogfish, &c. We may confidently anticipate a steady increase taking one year with another in both these products.

## CLAMS, CRABS, &amp;c.

It will be observed that for the first time in these returns there are entries for canned clams (3,500 cases) and canned crabs (1,000 cases). Both of these are new industries in which the parties putting up these articles expect a great development.

There is also an entry of 20,000 lbs. salted roe. This means the utilization of the roe of the canned salmon formerly thrown away but now salted and finding a market in Japan.

With the exception of the sturgeon fishing and the salmon catch on the Fraser River every item shows an increased development of the fishing industries of the province, and while there does not seem much reason to expect any recovery in the sturgeon fishery, the smallness of the salmon catch on the Fraser River may be attributed to one of the fluctuations to which this fishery is so liable and should not preclude us from expecting a satisfactory pack next year which is the year of the quadrennial large run.

I have the honour to remain, sir,

Your obedient servant,

C. B. SWORD,  
*Inspector of Fisheries.*

## SESSIONAL PAPER No. 22

A.—SCHEDULE of Salmon Canneries operated in British Columbia, Season of 1900, with  
Number of Cases packed by each Cannery.

Owners or Agents.	Name of Cannery.	District.	Locality.	Packed in 48-lb. Cases.
Cleeve Canning Co.	Cleeve	Fraser River	New Westminster	8,843
Burn & Walker	Premier	"	"	1,175
F. Boutilier & Co.	Boutilier	"	"	5,450
Jas. Anderson	St. Mungo No. 2	"	"	11,000
Lam Tung & Co.	Westminster	"	"	5,555
A. B. C. Packing Co.	Birrells	"	"	
"	Wadham	"	Ladner's	3,165
"	British American	"	Canoe Pass	10,710
"	Canoe Pass	"	"	1,597
"	Phenix	"	Steveston	4,193
"	Brittania	"	"	2,910
Victoria Canning Co.	Delta	"	Ladner's	2,018
"	Harlock	"	Port Guichon	
"	Wellington	"	"	5,959
United Canneries Co.	Industrial	"	New Westminster	2,632
"	Scottish Canadian	"	Steveston	20,386
"	Gulf of Georgia	"	"	18,041
"	English Bay	"	English Bay	15,264
Canadian Canning Co.	Star	"	Steveston	11,083
"	Vancouver	"	North Arm	4,900
"	Fraser River	"	"	4,000
Turner, Beeton & Co.	Terra Nova	"	"	7,005
"	London	"	Steveston	4,155
"	Fishermans	"	Port Guichon	
J. H. Todd & Sons	Beaver	"	Lulu Island	8,460
"	Richmond	"	Westham Island	2,700
Brunswick Canning Co.	Brunswick No. 1	"	Steveston	2,166
"	" No. 2	"	Canoe Pass	9,650
A. Ewen & Co.	Lion Island	"	New Westminster	6,105
B. C. Canning Co.	Dea's Island	"	Dea's Island	4,552
Currie & McWilliams	Currie's	"	Westham Island	27,870
Anglo-American Packing Co.	Anglo-American	"	Canoe Pass	3,827
Albion Island Canning Co.	Albion	"	Westham Island	8,036
Canadian Pacific Packing Co.	Canadian Pacific	"	Lulu Island	4,527
Pacific Coast Canning Co.	Bain's	"	"	12,312
Columbia Packing Co.	Colonial	"	"	15,019
McDonald Bros.	Westham Island	"	Canoe Pass	5,190
J. H. Hume & Co.	English	"	Steveston	8,763
R. Ward & Co.	Imperial	"	"	3,143
Walter Morris	Lighthouse	"	"	10,321
R. Houston & Co.	Atlas	"	"	4,437
Great Northern Canning Co.	Great Northern	"	English Bay	5,684
Alliance Canning Co.	Alliance	"	North Arm	5,770
Provincial Canning Co.	Provincial	"	"	5,892
Dinsmore Island Canning Co.	Dinsmore	"	"	10,500
Acme Canning Co.	Acme	"	"	5,763
Welch Bros.	Keltic	"	"	6,103
Greenwood Canning Co.	Greenwood	"	"	4,540
Wadhams & Sons	Wadhams	River's Inlet	River's Inlet	15,900
A. B. C. Packing Co.	Good Hope	"	"	13,858
B. C. Canning Co.	Victoria	"	"	13,550
Brunswick Canning Co.	Brunswick III	"	"	11,030
Vancouver Packing Co.	Vancouver	"	"	7,408
Victoria Canning Co.	Wannock	"	"	12,450
R. Draney	Namu	"	Nanu Harbour	9,300
J. Clayton	Bella Coola	"	Bella Coola	4,750
United Canneries Co.	Princess Royal	"	Princess Royal Island	3,341
B. C. Canning Co.	Windsor	Skeena River	Skeena River	15,000
Victoria Canning Co.	Standard	"	"	12,000
R. Cunningham & Sons	Skeena	"	"	15,500
P. Herman & Co.	Anglo-Alliance	"	"	10,000
Carlisle Canning Co.	Carlisle	"	"	11,369
Wallace Bros.	Claxton	"	"	11,505
Turner, Beeton & Co.	Inverness	"	"	15,075
A. B. C. Packing Co. (2)	Lowe Inlet	"	"	44,975
Victoria Canning Co.	North Pacific and B.A.	"	Lowe Inlet	10,856
W. Morris (2)	Naas River	"	Naas River	20,200
S. A. Spencer	Alert Bay	No. 9 District	Alert Bay	9,500
Clayoquot Fish Co.	Clayoquot	No. 10 "	Clayoquot	7,602
Total number of 48-lb cases				606,530



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B.—BRITISH COLUMBIA

Number of license.	Vessels.	Masters.	Tons.	CREWS.		BOATS.	
				Whites.	Indians.	Boats.	Canoes.
23	Ainoko .....	G. Heater .....	75	6	25	2	12
17	Allie I. Alger .....	W. E. Baker .....	75	8	23	2	11
22	Annie E. Paint .....	J. W. Anderson & E. G. Macaulay	82	7	25	2	12
4	Arietis .....	W. Heater .....	86	6	30	2	15
34	Aurora .....	F. Hackett .....	40	19	...	5	...
24	Beatrice .....	A. St. Clair .....	66	5	20	2	10
29	Borealis .....	T. Harold .....	47	7	16	2	8
9	Carlotta G. Cox .....	C. LeBlanc .....	76	25	...	8	...
28	Carrie, C. W. .....	R. E. McKeil .....	92	9	24	2	12
1	City of San Diego .....	H. Blackstad .....	46	19	...	5	...
3	Diana .....	A. Nelson .....	50	21	...	6	...
37	Director .....	M. F. Cutler .....	87	8	29	2	14
25	Dora Seward .....	H. F. Seward .....	94	10	24	3	12
8	E. B. Marvin .....	C. Campbell .....	96	8	26	2	13
18	Enterprise .....	V. Gullin J. Bishop .....	69	9	20	2	10
20	Favorite .....	L. McLean .....	80	5	32	1	16
14	Geneva .....	W. D. Byers .....	92	31	...	9	...
21	Hatzic .....	J. Daley .....	72	7	32	2	16
32	Ida Etta .....	D. Martin .....	69	6	18	2	9
31	Libbie .....	C. Hackett .....	92	8	24	2	12
2	Mary Taylor .....	W. O'Leary .....	43	21	...	6	...
23	Minnie .....	J. G. Searle .....	46	7	13	2	6
12	Ocean Belle .....	R. O. Lavender .....	87	26	...	8	...
26	Ocean Rover .....	F. Cole .....	56	5	16	2	8
5	Otto .....	I. F. Gosse .....	86	6	28	2	14
11	Penelope .....	A. McDougall .....	70	6	24	2	12
13	Sadie Turpel .....	John Bishop .....	56	7	20	3	10
36	Saucy Lass .....	W. Halgran .....	38	5	10	1	5
19	Teresa .....	G. Myer .....	63	7	21	2	10
16	Triumph .....	W. Cox .....	98	9	32	3	14
10	Umbrina .....	H. V. Hughes, J. W. Peppitt .....	99	8	27	3	13
38	Venture .....	J. Anderson .....	48	6	6	3	3
7	Vera .....	M. Ryan .....	60	21	...	6	...
30	Victoria .....	R. Balcum .....	63	6	20	2	10
6	Viva .....	D. McPhee .....	92	6	31	2	14
35	Walter L. Rich .....	J. Haan .....	84	7	14	2	7
27	Zillah May .....	W. Munro .....	66	7	16	2	8
...	Indian Catch .....	...	...	...	...	...	...
Totals .....			2,641	384	646	114	316

Total 37 schooners in the sealing industry.



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## Sealing Report, 1900.

BRITISH COLUMBIA COAST CATCH.		VICINITY COPPER ISLAND.		BEHRING SEA.		Totals.	Skins Branded.	Remarks.
Males.	Females.	Males.	Females.	Males.	Females.			
388	135			223	333	1,079	...	
196	192			404	431	1,223	2	
251	488			116	291	1,146	...	
430	386			285	261	1,362	6	
119	90	105	39	5	17	375	...	
147	148			168	244	707	3	
179	69			77	96	421	1	
271	291			215	396	1,173	...	
159	99			280	324	862	1	
335	182	29	35	218	152	951	...	
234	446			116	212	1,008	...	
				290	445	735	1	
252	533			287	344	1,416	4	
234	420			195	261	1,110	...	
234	315			285	326	1,160	...	
368	341			167	186	1,062	1	
304	342			315	393	1,354	1	
171	257			232	426	1,086	1	
206	159			223	305	893	2	
118	75			203	225	621	1	
387	541			61	167	1,156	...	
138	141					279	...	Wrecked.
299	436			27	306	1,068	...	
				170	326	496	...	
172	151			302	331	956	...	
154	78			300	307	839	1	
49	32			105	287	473	3	
21	23			55	136	235	2	
153	437			55	385	1,030	...	
220	229			239	393	1,081	5	
382	326			375	340	1,423	1	
				56	48	104	...	
354	455			218	340	1,367	2	
110	183			178	369	840	3	
317	435			231	418	1,401	...	
55	47			362	237	701	3	
222	327			137	280	966	1	
						1,364	...	
7,629	8,809	134	74	7,175	10,338	35,523	45	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the quantity and value of Fishing Materials and the Kinds of Fish in the Province of **British Columbia**, for the year 1900.

District.	VESSELS AND BOATS.				FISHING MATERIALS.				KINDS OF FISH.						Number.				
	Vessels.		Boats.		Gill Nets.		Seines.		Lines.	Salmon, canned, 48-lb. cases.	Salmon, salted, brls.	Salmon, dry salted, lbs.	Salmon, smoked, lbs.	Salmon, fresh, lbs.		Sturgeon, lbs.	Halibut, lbs.		
	Number.	Value.	Men.	Number.	Value.	Men.	Value.	Fathoms.										Value.	Fathoms.
1 Fraser River.....	57	228000	171	3711	222660	13720	556650	417524	1400	2100	3000	331361	500	5700000	80000	1175500	85000	3598000	1
2 River's Inlet.....	12	44500	36	651	39060	2562	130200	97650	1800	2700	100	91587	250	.....	2000	25000	.....	25000	2
3 Skeena River.....	11	34100	33	448	26880	2421	90000	67500	1000	1500	150	140280	2500	.....	55000	175000	.....	56000	3
4 Naas River.....	1	2500	8	82	4920	444	16500	12375	.....	.....	50	20200	200	.....	60000	25000	.....	40000	4
5 East Coast, Queen Charlotte Isl'd.	.....	.....	.....	30	4500	90	2500	1875	250	375	1500	.....	150	.....	6000	2500	.....	35000	5
6 West Coast, Queen Charlotte Isl'd.	.....	.....	.....	25	3750	100	2000	1500	300	450	275	.....	100	.....	5500	30000	.....	25000	6
7 Cape Scott to Comox.....	.....	.....	.....	36	4000	90	2500	1875	800	1200	375	9500	250	.....	75000	255000	20000	450000	7
8 Comox to Victoria.....	67	13400	201	80	4800	160	5750	4300	4000	6000	2500	.....	250	.....	75000	255000	20000	450000	8
9 Victoria to Cape Beale.....	7	1800	21	25	1500	100	3000	2250	1000	1500	2000	.....	250	.....	7500	25000	.....	5000	9
10 Cape Beale to Cape Scott.....	3	750	10	25	2250	100	2750	2060	900	1350	250	7602	750	.....	10000	5000	.....	15000	10
Totals.....	158	325050	475	5113	314320	19787	811850	608909	11450	17175	10200	606530	4950	5700000	301000	1728000	105000	4261000	
Values.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2911344	49500	228000	30100	172800	5250	213050	

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RETURN showing the Quantities and Value of Fish, &c., in British Columbia—*Concluded.*

KINDS OF FISH.																		
District.	Herring, fresh and salted, lbs.	Herring, smoked, lbs.	Outlachs, fresh, lbs.	Outlachs, salted, brls.	Outlachs, smoked, lbs.	Smelt lbs.	Trout, lbs.	Codfish, lbs.	Skill, brls.	Shad, lbs.	Assorted fish, lbs.	Hair-seal, skins.	Sea otter, skins.	Fish oil, galls.	Fish, guano, tons.	Caviare, lbs.	Salmon roe, salted, lbs.	Totals.
Number.																		% cts.
1 Fraser River .....	450000	160000	250000	275	2500	45000	155000	155000	5000	160000	500	500	35000	200	1500	20000	20000	2,230,732 80
2 River's Inlet. ....	25000						500			1500	900	300	9500					450,230 10
3 Skeena River. ....	5000		60000	620	1000		2250			2000	275		600					763,090 25
4 Naas River. ....	5000	2500	400000	900	20000		1000				750		1000					141,797 50
5 East Coast Queen Charlotte Isl'd.	30000	2500						5500	40	15000	2000	2000	30000					16,425 00
6 West Coast Queen Charlotte Isl'd.	25000	2500						10000	65	25000	2000	500	12000					9,450 00
7 Cape Scott to Comox. ....	25000	1500	120000	360	2000	6500	10000	13000	15	10000	500	350	6000					66,160 00
8 Comox to Victoria. ....	350000	25000	100000	50	2000	35000	156000	350000		250000	300	300	16000					130,962 50
9 Victoria to Cape Beale. ....	10000	2000					5000	9000		8000	6000	250	20	12000				9,725 00
10 Cape Beale to Cape Scott .....	20000	4000					10000	6000		7500	7500							60,402 10
Totals. ....	945000	200000	930000	2205	28100	86500	339750	548500	120	5000	484000	7825	20	128100	200	1500	20000	3,878,975 25
Values. .... \$	28350	20000	46500	22050	2810	4325	33975	27425	1200	250	24200	5869	8000	35227	6000	750	2000	22,500 00
3,500 cases canned clams, \$13,500; fresh clams and mussels, \$9,000.																		
1,000 cases canned crabs, \$10,000; fresh crabs and abalones, \$22,500.																		
Shrimps and prawns .....																		
Oysters. ....																		
Estimate of fish not included in above .....																		
Total value. ....																		
Fur-seal catch, value. ....																		
4,315,975 25																		
562,845 00																		
4,878,820 25																		
(Grand total. ....)																		

## RECAPITULATION

OF Yield and Value of the Fisheries of **British Columbia** for the Year 1900.

Kinds of Fish.	Quantity.	Price.		Value.
		\$	cts.	
Salmon, canned (29,113,440 cans).....48 lbs. cases	606,530	4	80	2,911,344 00
" salted.....Brls.	4,950	10	00	49,500 00
" dry salted.....Lbs.	5,700,000	0	04	228,000 00
" smoked....."	301,000	0	10	30,100 00
" fresh....."	1,728,000	0	10	172,800 00
Sturgeon....."	105,000	0	05	5,250 00
Caviare....."	1,500	0	50	750 00
Halibut....."	4,261,000	0	05	213,050 00
Herring....."	1,145,000	0	03 & 0 10	48,350 00
Oulachons....."				71,360 00
Smelts....."	86,500	0	05	4,325 00
Codfish....."	548,500	0	05	27,425 00
Trout....."	339,750	0	10	33,975 00
Skill.....Brls.	120	10	00	1,200 00
Shad.....Lbs.	5,000	0	05	250 00
Sea otter.....Skins.	20	400	00	8,000 00
Hair seals....."	7,825	0	75	5,868 75
Fur seals....."	35,523	15	00	562,845 00
Mixed fish.....Lbs.	484,000	0	05	24,200 00
Fish oil.....Galls.	128,100	0	27½	35,227 50
Fish guano.....Tons.	200	30	00	6,000 00
Salted roe.....Lbs.	20,000	0	10	2,000 00
Oysters....."				12,000 00
Shrimps and prawns....."				5,000 00
Clams, canned.....Cases.	3,500	10	00	13,500 00
Crabs, "....."	1,000	10	00	10,000 00
Fresh clams and mussels....."				9,000 00
" crabs and abelonies....."				22,500 00
Estimate of fish not included in above.....				365,000 00
Total.....				4,878,820 25



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## CAPITAL in Fishing Plant and Material in British Columbia Fisheries, 1900.

Vessels, Boats, Canneries, &c.	Number.	Value.	Total Value.
		\$ cts.	% cts.
<i>Fisheries—</i>			
Vessels .....	158	325,050 00	
Boats .....	5,113	314,320 00	
Scows, &c. ....		17,750 00	
Gill-nets, fathoms .....	811,550	608,909 00	
Seines .....	11,450	17,175 00	
Lines, hooks, &c. ....		10,200 00	
Salmon canneries .....	71	1,420,006 00	
Cold storage plants .....	7	87,500 00	
Oil factories .....	2	35,000 00	
Salteries .....	2	4,000 00	
			2,839,904 00
<i>For Sealing—</i>			
Vessels (actually engaged) .....	37	120,000 00	
Boats .....	114	11,400 00	
Canoes .....	316	15,800 00	
			147,200 00
<b>Total.....</b>			<b>2,987,104 00</b>

Hands employed in fisheries, boats and canneries .....	19,787
" vessels .....	475
Sailors and hunters sealing (whites) .....	386
" (Indians) .....	646
	21,294

## APPENDIX No 10.

## QUEBEC.

REPORT ON THE GULF OF ST. LAWRENCE FISHERIES FOR THE SEASON OF 1900, BY FISHERY OFFICER WM. WAKEHAM, M.D., COMMANDER OF "LA CANADIENNE."

GASPÉ BASIN, January 2nd, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour herewith to submit the annual report of the Fisheries of the Gulf Division, province of Quebec, for the past year, together with synopsis of the reports of the overseers, and the usual statistical totals showing the yield and values in detail for the various subdivisions

As was foreshadowed in the preliminary statement published in last year's report, the returns show an increase in value of \$122,013 over those of 1899. This is due to an improvement in the catch of cod, mackerel, smelts and seals. The salmon fishery, which I had expected to have been better than that of 1899, really showed a decrease of over 100,000 lbs. Fishing practically closed with the middle of September, as after the gale of the 13th of that month, with its accompanying loss of life and property, very little was done. Many of the boats which were destroyed were not replaced, and fishermen were generally nervous about going any distance off shore.

## COD.

This fishery, which usually furnishes about half of the value of the yield in the division, shows an increase of about 12,000 cwt. This improvement was due to a good summer's fishing on the south coast. On the Labrador the presence of heavy field ice in June and July, all along shore and among the islands, practically prevented any fishing. The fish were there in abundance, but it was impossible to set out any nets for their capture. After the disappearance of the ice with the end of July a fair amount of fishing was done by the local inhabitants with the hook and line, but by this time all the vessels had left the coast for the outer Labrador. As this makes the fourth year in succession during which the vessels have done nothing, it is safe to say that we will see a very small fleet on the Labrador next year.

## SALMON.

This fishery shows a decrease of about 100,000 lbs. The failure was confined to the south shore of the Gulf, as on the north shore the returns show a considerable increase. The failure was due entirely to weather conditions, the fish did not, as usual, remain any time along the coast, or in the estuaries, but proceeded directly into the rivers. The weather during June and July was cloudy, with frequent showers. This favoured the angler, and as a result of this, coupled with a greatly increased number of fish in the rivers, we had perhaps the best angling season on record. On the north shore both anglers and netters had good fishing.

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## HERRING.

The returns show a slight increase in this fishery, although the catch was unevenly distributed. On the Labrador nothing whatever was done, but along the River St. Lawrence, and shore of the Gulf from Cape Chatte to Cape Rosier, the catch was above the average, while further on, along the southern coast of Gaspé and Bonaventure, the yield of fat herring—those taken in the late summer and fall—was not by any means as good as it usually is. Spring herring were everywhere abundant on the usual spawning grounds.

## MACKEREL.

The catch of mackerel, now confined entirely to the Magdalen Islands, shows a slight increase. These fish were abundant about the islands in the fall, but because the price had fallen, the fishery was not prosecuted with any vigour. A few small schools of mackerel were reported as having been seen between Cape Chatte and Godbout, but except at the Magdalen Islands, only an odd mackerel was taken here and there about the coasts of the mainland.

## LOBSTERS.

The Lobster pack continues to show a decrease in spite of the fact that under the new regulations we are fishing through a considerably longer season. This, of course, really means nothing, as with one exception all the larger canneries regularly close down when about half the season has expired.

At Anticosti, Mr. Menier is preparing to go extensively into the business of lobster packing. His men are putting up a model cannery at Fox Bay. The machinery for making and sealing the cans will be driven by steam power, and the building will be lighted by electricity. The lobsters, which will be caught by small parties of fishermen, stationed along both shores of the island, will be brought alive to the cannery in welled vessels, and those from the more distant points in steam vessels. Fishermen are now being engaged in Gaspé and Nova Scotia to proceed to the island in the early spring of 1901, and inducements are being held out to them to settle on the island, where it is Mr. Menier's intention to prosecute the cod, herring and turbot fisheries which abound about the island. The general direction and management of all this has been placed in the hands of Mr. Doggett, of Nova Scotia.

## SMELTS.

The statistics of the smelt fishery show a gain of about 60,000 pounds. During October, when the fishery begins in Gaspé Bay, the weather was cool, so that the fish then taken, which are the first to reach the New York market, got there in good order, and commanded a high price.

## SEALS.

The seal hunt, which has been gradually abandoned by those who formerly carried it on in vessels fitted out at the Magdalen Islands and Esquimaux Point, shows a very considerable gain in 1900. The catch for 1899 only amounted to 4,145 seals, nearly all of which had been taken on the Labrador, or shot on the ice off Point des Monts, while that for the season now being reported on amounts to 25,729. This considerable gain occurred at the Magdalen Islands. The ice on which the seals are pupped in March was driven by favourable winds on the Magdalen Island shores, permitting the people to reap quite an abundant harvest in the shape of pelts and oil. For a few days, while the winds held the whelping ice on shore, men, women and children were engaged in the work of killing, scalping and hauling the pelts on shore.



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Bait was fairly abundant throughout the season, and, with very few exceptions, the fishing regulations were strictly observed. At the Magdalen Islands a number of lobster traps, being fished out of season, were destroyed by crews sent out from the ship.

I beg to append synopses of the reports of some of the local fishery overseers:—

### SYNOPSSES OF REPORTS OF SOME OF THE LOCAL OVERSEERS.

*Bonaventure Subdivision.*—Officer George Forrest reports a diminution of about one-fifth in the yield of the fisheries in his division, the principal failure was that of the salmon net fishery. Cod fishing was also below the usual average. This was mainly due to a scarcity of bait in the late summer and fall. Herring was abundant in the spring, but scarce all through the rest of the season. The lobster pack shows a slight increase, with the same number of canneries and traps. Fishery regulations were closely observed.

*Port Daniel Subdivision.*—Officer F. X. Chappados reports a slight decrease in the catch of cod, due to the rough weather in September and October. The salmon fishery was slightly better than that of the preceding season. Spring herring was scarce in Port Daniel Bay and at l'Anse a Gascon, but fall herring—those taken in the fall—were more abundant. The lobster pack continues to decrease.

*Gaspé Bay Subdivision.*—Officer Walter Langlois reports a slight increase in the yield of the salmon net fishery. The herring fishery shows an improvement of about 1,200 barrels. Cod fishing began on the 22nd May, and the yield was good up to the middle of September, when a heavy gale did a great deal of damage along the coast, particularly at Point St. Peter, where a clean sweep was made of boats and fishing stages. The fishermen of this Cove are particularly anxious that the attention of the government should be called to their need of a breakwater, as a very extensive fishery is carried on at Point St. Peter, and this is by no means the first occasion on which their boats and stages have been destroyed. The lobster fishery shows a constant decrease. The smelt fishing was good. No mackerel was taken in Gaspé Bay this season.

*Mont Louis Subdivision.*—Officer Louis Letourneau reports that there was no lobster fishing in his division this year. The catch was so insignificant the year before that it was impossible to get men to fish for them. Salmon net fishing was poor. The rivers were high when the fish struck the coast and they ran right up at once. Anglers, however, did well. Cod fishing was good all through the season, from June to November. The white whales, which frequently chase the cod away during the fishing season, did not visit the coast this year. Herring struck a little later than usual, but remained on the coast all through the season. They were more abundant in the western part of the division than toward the east. A good many more fishermen were engaged in this fishery than usual, and more care seems to have been given to the packing and curing of the fish. No mackerel were taken, and the fishery for turbot, as well as halibut, was not a success. This was due to the constant strong currents in the river. These fish are taken in 60 fathoms and over. The fishery regulations were everywhere well observed.

*Magdalen Islands South.*—Officer J. A. Chevrier reports that in March a large number of seals were killed on the ice all around the islands except at Amherst, where the winds were not favourable. Herring struck a few days earlier than usual, and for several weeks were taken in great abundance, many cargoes were sold to foreign vessels for food and bait purposes. There does not seem to be the slightest diminution in the abundance of these fish. Spring mackerel struck in unusual abundance, and an extraordinary catch was made, and high prices paid the fishermen, unfortunately for the local merchants the price fell before the fish could be marketed, so that considerable losses



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were made. The fall fishery was limited, the price being low, fishermen devoted their attention rather to the cod fishery. Lobster fishing about Amherst Island does not show any decrease, but at Grindstone the failure continues. Many are of the opinion that the open season of fishing should be divided in two halves, the first to close about June 15, the second to open on August 1, and to continue until October 1. Several parties were fined for fishing out of season. Local fishermen complain that their nets are frequently carried away or torn by vessels passing in and out of the bay. They claim that foreign fishing vessels should either remain outside of Pleasant Bay altogether—or if they come inside that they should remain there, and visit their nets in boats as do the resident fishermen. Mr. Chevrier has many times represented these complaints, he also claims that no nets should be allowed to be set after August 1, that is when the resident fishermen do their hand and line fishing for mackerel.

*Magdalen Islands North.*—Officer Procul Chevrier reports that the spring hunt on the shore ice for seals was an unusually good one, 9,400 seals having been killed and landed in his division. Though the prices now paid for skins and oil are much lower than they formerly were, yet this unusual spring harvest was a godsend to the people. Herring struck about April 18, an enormous catch was made, and many cargoes were sold to vessels from the maritime provinces and the United States. The lobster fishery continues to show a decrease, and this in spite of the fact that ten new canneries were opened in the division. The spring mackerel fishery was good, but the price paid for fall mackerel was low. Mr. Chevrier found a number of lobster traps set illegally, during some of his visits—he destroyed them without having been able to find out who owned them; otherwise the regulations were well observed.

*Pointe des Monts Subdivision.*—Officer N. A. Comeau reports salmon fishing with nets a good average catch; fish were late in striking the coast, owing to the general lateness of the season, and the great quantity of snow in the interior causing the rivers to remain high. Probably owing also to this fact the fly fishing was much above the average, especially in the Trinity River, where the season was the best on record. Trout appeared to be scarcer than usual, this may have been due to the fact that passing up with the high water they escaped observation. Cod were late in coming, only a few being taken before August, after this date they were, however, abundant, but especially squid was plenty—the cod fishing therefore shows an increase of nearly two-thirds over the previous season. Herring were abundant from Point des Monts west to Manicouagan, but scarce east of Point des Monts. Halibut shows a slight increase and the fish were much larger than of late years. Smelt were abundant, though but few were taken, as there are no facilities for shipping them to market in the late fall. No mackerel were taken, though a few schools were seen off shore. One small lobster cannery was operated at Cowees—the proprietor reports lobsters has been scarce. White whales were extremely abundant during the whole season, fishermen attribute the scarcity of herring below Point des Monts to the presence of these mammals. Taken as a whole the returns show a considerable increase in value. The regulations were well observed and no complaints were made.

*Moisie Subdivision.*—Officer Theotime Migneault reports that salmon fishing began on the 23rd May and ended on the 16th July. The fishery was a good one, though the season was a poor one for netting, as the waters were too high and the currents too strong to keep nets out, not 10 per cent of the salmon that entered Moisie River were netted, 236 fish were taken by the anglers. The cod fishery was good, it began with August and continued up to the 12th October. Herring missed entirely, the fishermen attribute this to the great abundance of squid, and the white whales. One Gloucester vessel called here halibut fishing, but on being warned not to set his trawls within the three mile limit he sailed away. The salmon net regulations were strictly enforced and observed.

*Mingan Subdivision.*—Officer George DuBerger reports that 17,467 cwt. of cod were taken by the shore fishermen in his district; this represents a fair fishery. The salmon net fishery in the St. Johns tributary was good, almost 40,000 lbs. being taken,

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this in spite of the fact that for two weeks the fishermen were unable to get their nets out owing to the high water of the river, during all this time salmon were passing up in great numbers. Sportsmen did well, 61 fish being taken in Jupitagan, 75 in Mingan, 170 in Romaine, while Mr. Hill and party took 200 in the St. John.

*Natashquan Subdivision.*—Officer John W. Scott reports that the seal hunt made in the ice by the vessels from Natashquan was a failure, only 120 seals being killed, this was due to rough weather and the scattered condition of the ice. The salmon net fishery show a decrease of 5,000 lbs., this was due to the high water in the river which made it impossible to set out nets until the 18th June, by which time a large proportion of the fish had passed up, the sea coast nets did well. The cod fishery was good, their being an increase of 2,300 cwt. over the catch of 1899. The lobster pack shows a slight falling off, though the number of traps fished this year was much greater than in any previous season.

The whole of which is humbly submitted.

I have the honour to be, sir,

Your obedient servant,

WM. WAKEHAM,  
*Officer in charge of the Gulf Fisheries*

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REPORT ON THE FISHERIES ON THE SOUTH SHORE FROM LÉVIS TO  
BAIE DES CHALEURS, BY INSPECTOR N. LAVOIE, M.D.

L'ISLET, Que., January 15, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—In transmitting the fishery statistics for the year 1900, of that part of my district extending from Lévis to Cape Chat, I beg to offer a few general remarks on the fisheries of our coasts.

I regret to state that although eel and bar fishing may have proved pretty fair at certain places, such as Lévis, Beaumont, St. Michel and St. Valier, the catch of other fish proved almost a complete failure. In some localities, the decrease will amount to about seventy-five per cent as compared with last year. At Trois-Saumons and L'Islet, the disappearance of small fish has completely discouraged the fishermen, so much so that on a distance of four miles on each side of the river of Trois-Saumons where there used to be formerly seven fisheries, there is not a single one now. Fishermen attribute their failure to sawdust and rubbish from the mills on Trois-Saumons River. As the bottom of these fishing grounds is composed of mud, it is natural that sawdust should more firmly adhere to it than if it were formed of rocky bottom. I was told that at several places, sawdust is several inches thick, and there can be no doubt that if such is the case, the disappearance of the fish is due to this cause.

The eel fisheries down here have sensibly decreased during the past few years. This is due to the improvements in the large fisheries of Lévis, Beaumont and St. Michel. These fisheries have, so far, proved very remunerative and it may be that this has something to do with the run of eels on the part of that coast. With favourable winds and other lucky circumstances, a good catch may now and then be recorded among the brush fisheries, but this is an exception.

Barfish were most abundant on the grounds around Crane and other adjacent islands. Sportsmen were delighted. It is alleged that over 100 barrels of barfish were caught on these grounds, with hook and line, during the past season.

Twelve seals were killed by people from Crane Island.

*Cod.*

The oldest fishermen all agree that cod has never been so abundant as now for the past fifty years. This is easily accounted for by the enormous quantities of squid and herring which has frequented this part of the coast during the whole season. The total catch will amount to 3,446 drafts against 3,118 last year; an increase of 328 drafts. As already stated, bait in the shape of squid and herring was abundant the whole season round, and the weather proved all that could be desired.

Owing to the want of competition, prices are not so high as last year; the usual rate being from three dollars to three dollars and a half.

However, this still leaves a fair margin in the hands of the fishermen, owing to the large increase in the catch.

*Herring fishing.*

The great success experienced in this fishery last year, induced many people to believe that it would be again profitable this season. However, these expectations were not realized in many cases. There are indeed some localities, such as Rimouski, Ste. Luce, River Ouelle and Green Island where the catch was good, but everywhere else it was almost a failure. The statistics will show a falling off of nearly 2,000,000



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pounds in the catch of herring for the past two seasons. The total yield this season was hardly 2,000,000 pounds, while last year it amounted to six and seven million pounds, and perhaps more. The cause of failure is ascribed to the frequent and long continued easterly gales which destroyed most of the best brush fisheries of this division from River du Loup to Ste. Flavie.

#### *Eel fishery.*

This fishery, which yielded 112,690 pounds in 1899, from St. Jean Port Joli to Ste. Flavie, will not, this year yield more than 40,789 pounds. The brush fisheries of St. Jean Port Joli, St. Roch, Ste. Anne, Rivière Ouelle which used to catch eels by the thousand, will not produce more than 200 or 500 each.

#### *Sardine fishery.*

Had it not been for an accidental run of sardines which occurred during the last days of October, and at a time when it was least expected, this fishery would have been a total failure. As it is, a great number of fishermen missed this stroke of good fortune owing to their neglect to repair their fisheries in time, but several others who were more careful, reaped a rich harvest. The localities where fishing was most successful were Ste. Luce and Rimouski. The statistics will show 2,640 barrels, against 1,833 in 1899.

#### *Salmon and Trout fishing.*

Salmon fishing will show an increase of 6,532 pounds over the catch of last year, being 15,942 pounds against 9,410. The most favoured localities were Green Island, Ste. Luce and St. Denis. In other places, the catch amounted to 100 or 500 pounds. Taken as a whole, this fishery was not a success.

The catch of trout amounted to 3,625 pounds, only 25 pounds of which were caught on the river shores, the balance being taken in the interior lakes of St. Simon, St. Fabien and St. Mathieu. Lake St. Mathieu now belongs to Mr. Tobin, M.P. He keeps a large staff of experienced guardians on the numerous small lakes of his seigniory for the purposes of preventing poaching and illegal fishing.

#### *Sturgeon and Shad.*

Although the catch of sturgeon is apparently on the increase, it is far from yielding a fair revenue to the fishermen. In 1890 the catch is given at 12,297 pounds, while this year it will reach 66,699. Kamouraska and the River Ouelle were the most favoured localities.

Shad will show only 3,692 pounds, against 4,820 in 1899. This is the whole catch of the seventeen localities which I visited.

#### *Porpoise Fishing.*

This fishery, which in years past was so popular and so remunerative in some localities, such as River Ouelle, has sadly come down, so much so that for a number of years it has hardly paid for the outfit. The owners, however, still cling to hope, always expecting a fortune in the success of a new season. There were only twelve porpoises killed at River Ouelle this season, the same number as in 1899. The price of oil was a little higher, having increased from 28 to 32 cents. Those twelve porpoises yielded 45 barrels of oil, or 1,125 gallons. At Trois Pistoles six porpoises were killed, yielding about 560 gallons of oil. At Cap à l'Original it is reported that sixteen seals were killed, yielding 48 gallons of oil.

During the months of July, August and September, hardly a fish was caught in this part of my division. Bad weather is blamed for this unsatisfactory state of things. Easterly gales of long standing completely wrecked the brush fisheries, and this explains how the statistics will show but a small quantity of mixed fish, far below that of 1899. The catch of this season will barely amount to 344,000, against millions of pounds last year. The number of brush fisheries was about the same as in 1899, but if what I heard is true, this number will considerably be reduced in certain localities next season.



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## COMPARATIVE Statement of the Yield of Lobsters in the Divisions of Gaspé and Bonaventure during the Years 1899 and 1900.

Locality.	Owner.	Traps.	Men.	Girls.	Flats.	Cases.	Remarks.
1900.							
Belle Anse.....	Hoegg & Co.....	2,300	15	7	17	230	
Bois Brûlé.....	White & Hipson..	900	11	12	4	121	
Anse Brillante.....	Leggo Bros.....	350	4	5	4	36	
Bois Brûlé.....	J. P. White.....	750	4	9	5	173	
Corner of the Beach.....	O. Mabee.....	750	9	18	3	180	New license.
Percé.....	J. W. Windsor.....	2,000	23	8	10	133	
".....	Chas. Robin.....	1,800	16	7	7	159	
Cape Despair.....	J. W. Windsor.....	4,000	47	20	20	300	
Little River East.....	J. Alexander.....	1,500	18	15	15	95	
Little River West.....	Loggie.....	800	9	13	4	75	
".....	J. Alexander.....	2,000	23	12	10	140	
Little Pabos.....	J. Legouffe.....	1,000	10	15	6	100	
Grand Pabos.....	P. Hurley.....	35	4	5		56	
Anse aux Gascons.....	J. Alexander.....	700	24	19	15	60	
Newport Point.....	Chas. Robin.....	1,800	21	18	8	218	
Newport.....	E. LeMarquand.....	1,100	11	12	4	69	
".....	J. W. Windsor.....	2,000	30	19	9	200	
Port Daniel.....	Hoegg & Co.....	2,500	30	20	20	250	
".....	R. Sullivan.....	350	4	3	3	40	
Port Daniel West.....	Alexander Bros.....	1,500	23	15	10	160	
Shigawacke.....	".....	2,000	23	18	18	170	
Port Daniel West.....	P. Day.....	390	4	5	4	35	New license.
".....	H. Journeau.....	400	6	4	3	26	"
Hopetown.....	J. Alexander.....	300	3	3	2	35	"
".....	Hoegg & Co.....	2,500	39	21	23	254	
New Carlisle.....	Th. Foreham.....	1,800	18	8	18	193	
Bonaventure.....	Hoegg & Co.....	1,100	8	7	4	115	
Caplin River.....	J. P. Windsor.....	1,000	11	7	4	66	
Carleton.....	B. Leclerc.....	420	4	3	2	25	
Totals.....		37,545	452	328	242	3,714	
1899.							
Belle Anse.....	Hoegg & Co.....	2,400	19	20	5	270	
Bois Brûlé.....	P. J. White.....	900	9	12	4	100	
".....	Leggo Bros.....	300	3	4	3	35	
Brilliant Cove.....	White & Hipson..	600	5	5	5	116	
Corner of the Beach.....	O. Mabee.....	780	6	14	3	166	
Malbaie.....	Alexander.....	950	8	8	5	52	
Percé.....	J. W. Windsor.....	1,600	18	12	8	220	
".....	Chas. Robin.....	1,500	14	12	7	173	
Cape Despair.....	J. W. Windsor.....	2,500	27	20	20	560	
Little River East.....	J. Alexander.....	1,000	12	13	15	50	
".....	".....	2,000	20	10	5	200	
Little River West.....	".....	800	14	12	10	200	
".....	".....	1,500	18	4	14	150	
".....	Soucey.....	300	4	6	4	85	
Grand River.....	Loggie.....	800	8	14	4	123	
Little Pabos.....	J. Legouffe.....	1,200	12	15	6	90	
Grand Pabos.....	P. Hurley.....	600	4	8	2	122	
Newport.....	Chas. Robin.....	2,000	14	17	7	116	
Port Daniel.....	Hoegg & Co.....	2,500	30	20	20	350	
Port Daniel West.....	A. Sullivan.....	460	3	4	3	30	
".....	Alexander Bros.....	1,600	15	15	25	170	
Hopetown.....	Hoegg & Co.....	2,000	28	25	25	324	
New Carlisle.....	H. Foreham.....	1,800	7	6	15	120	
Bonaventure.....	Hoegg & Co.....	900	8	6	5	82	
Caplin River.....	J. P. Windsor.....	1,000	8	8	5	57	
Carleton.....	B. Leclerc.....	400	3	4	3	26	
Newport.....	E. LeMarquand.....	1,100	4	15	4	25	
".....	J. W. Windsor.....	1,600	18	16	6	253	
Totals.....		35,090	339	325	228	4,165	

*Remarks on the Lobster Industry of Gaspé and Bonaventure Counties.*

In order to present the matter in a clear and concise shape, I have prepared the above schedule, showing the yield of the lobster fishery in 1900 and 1899, together with such other information relative to the industry as I could procure. While there was, at the beginning of the season an actual increase of nearly 2,500 in the number of traps, the number of cases packed shows a considerable falling off; no less than 451 cases, as compared with 1899. This, I consider, should not be ascribed to a scarcity of lobsters frequenting the grounds, so much so as to the damage done to fishing traps and other gear by gales and storms during the months of May and July, as well as the cold weather which prevailed during the whole month of May and the early part of June. The loss experienced by each cannery has already been described in my progress reports; it is therefore unnecessary to return to the subject. Had it not been for these unfortunate occurrences, I entertain no doubt that the total catch would have shown twenty-five per cent better, making the number of cases packed this season at least 500 larger than last year, and this too with no increase in the number of canneries.

One pleasing feature to notice is the alacrity with which people submit to the regulations enacted for the protection of this valuable industry. During a whole season's intercourse with fishermen and canners, I met with nothing but courtesy and willing compliance. In this connection I may mention the fact that the regulation forbidding the setting of traps in waters less than two fathoms deep was religiously observed, as you have already been apprised by my progress reports. The regulation relative to the minimum size of lobsters was also strictly observed, and when visiting boats on their arrival, I never detected a single fish under 8 inches. As a matter of fact, lobsters were on an average of a larger size this year than usual; very few fish measuring less than 10 inches and a good many over 15 and 16 inches.

Females in spawn did not visit the grounds until the middle of June. The cold weather experienced during the whole month of May and the early part of June may have had some influence on their migration.

The departmental reports for 1880 show a total lobster catch for the divisions of Gaspé and Port Daniel (fishing apparently not being carried on higher up than Port Daniel Bay) of 448,559 one pound cans, which being reduced to cases of four dozen each give a total of 9,345 cases against 3,714 in 1900. The figures for 1890 are not so disproportionate and the difference is less striking; being only 4,387 cases in 1890, against 3,714 in 1900.

These figures, if correct,\* are certainly instructive. They show the heavy inroads made on the fishery since an enormous decrease of 5,631 cases occurs in the short space of twenty years. They would also go far to explain the heavy rise which has taken place in prices during the interval.

I have the honour to be, sir,  
Your obedient servant,

N. LAVOIE,  
*Inspector of Fisheries.*

## SESSIONAL PAPER No. 22

REPORT ON THE FISHERIES OF THE WESTERN DIVISION OF QUEBEC  
FOR THE YEAR 1900, BY INSPECTOR A. H. BELLIVEAU.

OTTAWA, 1st Feby., 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—The district under my charge comprises all that part of the province of Quebec south-west of the Saguenay River and Bellechasse County. For the convenience of establishing comparisons in the yield of fisheries with those of former years, the old subdivisions are mostly adhered to, even when coming under different officers.

In nearly every part of my large district, there seems to be a steady decline of the best grades of fish, the bulk of the yield now chiefly consisting of the coarse kinds. For instance, in the counties of Charlevoix and Montmorency, including the numerous weirs of the Island of Orleans, although the aggregate value is even higher than the previous ones, eels constitute the principal item therein. In fact, it is asserted that shad, bass, whitefish and other good fishes have become so scarce that hardly any attempts are now made to capture them, the weirs being only set late in the season for the eel fishing. The season of 1900 must have been a propitious and favourable one for that kind of fish, as the catch of eels proved a profitable one.

The same remark could be applied to most of the other subdivisions. In the counties of Richelieu and Yamaska, the best fishing localities of lake St. Pierre, the catch is now chiefly made up of coarse and mixed fish, which exceeds three quarters of a million pounds in the latter county alone. Not only the valuable food fishes are getting scarcer, but even the coarse grades are gradually falling off in size as well as in quantity. So small are some of the immature fish now offered for sale on our public markets, that it seems a regrettable shortsightedness on the fishermen's part not to have liberated them alive when possible. Fishery regulations should specify a minimum length or weight of the different species which are worthy of protection; but so long as immature fish will be tolerated on our markets, so long will quality be sacrificed to quantity by the improvident and needy fisherman.

Naturally, as the size of fish declines, the mesh of the capturing implements decreases in proportion, hence the necessity of enactments restricting the size, use and limits of all such fishing gear. This specially refers to the above mentioned district of lake St. Pierre, around whose shore it is estimated, that there are over 3,000 hoop nets in use, half of which perhaps would fall below the former measurement of mesh.

As nearly every fisherman in these localities is possessor of ten or fifteen of these verveux, (though paying license for a couple) he replaces the useless ones by new ones of as small a mesh as will be tolerated. Again, I strongly recommend that proper regulations be adopted to modify and regulate this popular mode of fishing. Were all licensed fishery apparatus so marked, it would very much facilitate the duties of the different fishery officers.

While the catch of bass (achigan) in the whole inland district from Quebec City to the Upper Ottawa, is given at only 86,000 pounds, that of pickerel, pike, eels, perch, sturgeon and even catfish all exceeded 300,000 pounds, besides nearly 2,000,000 pounds of other coarse and mixed fish not itemized. The total fish yield of this district aggregates a value of nearly \$170,000 being about as much as last year.

In the statistical table, the Ottawa River subdivision shows a value of \$24,300, which looks like an increase over the previous one, but it is not, as this amount includes value of the fisheries of Gatineau lakes and streams as tributaries of the Ottawa, and in fact, represents a decrease of about \$6,000.

There is also a considerable falling off in the St. Maurice division, owing to the poor catch of tom-cod in that vicinity. The shortage of this little frost fish was so much felt that the local shippers had recourse to the Miramichi district to supply the demand. It



is to be hoped that the old time abundance of the tommy cod will again put in an appearance, as it is considered quite a boom in that locality, coming as it does at a time when other remunerative employment is scarce.

When in Three Rivers, seeking information respecting this branch of the fishing industry, I was told of a certain party who had shipped several car loads of tom cod. Upon questioning the individual himself, I found out that it was true; but that these frost fish had not all been caught in the vicinity; that they came mostly from Chatham, N.B., and of course had already been included in the catch of that district.

It is most difficult to secure reliable data in such matters. Some fishermen are unwilling to give any real information, fearing increased taxation, others answer without reflection, at random, careless to deceive, and others with perceptible exaggeration one way or the other. When one computes a weekly catch of a few hundred pounds of fish, multiplied by four weeks, for six to nine months, the individual fishermen remain astounded at the result. I have met fishermen who when questioned about their season's catch of fish would say, 'I don't know, a few hundredweights, perhaps a couple of thousand pounds altogether.' Then by examining the books of the wharfinger of the locality I would ascertain that the same doubtful party had shipped as much as 1,500 lbs. of fish at one time to the Montreal market, and would average over 700 lbs. weekly, all during the navigation time, thus bringing his individual catch over 15,000 lbs., exclusive of the winter catch. Were it not to assort the different species, it would be easier to estimate the bulk of fish shipped to Montreal markets from the end of Lake St. Pierre to Lake St. Louis. Some better means of obtaining more reliable information from the indifferent fishermen should be devised for these inland divisions. However, even if the present figures are partly estimated, I am of opinion that in most cases they are still undervalued, as very often the catch of the amateur fisherman for domestic use is not included, that of licensed fishermen alone being collected. On another occasion I met a fisherman on the Bonsecour market who admitted having about 2,000 lbs. of carp on that June day, and who disposed of it all at fair prices. Although somewhat prejudiced against all coarse fish in general, and of the sucker kind in particular, I found this large carp, locally named *nez galeux*, very palatable, so much so that I went to examine the means of their capture. This characteristic of scabby snout in the *catostomus communi*, from which this species receives its local name, is only noticed in the male fish during their breeding season, after which it disappears. They are caught with seines in about 4 and 5 feet of water when approaching their spawning beds. The current being rather strong in the vicinity of St. Lambert, it requires five men to handle the seine, four of whom jump in the water at stated intervals as the seine is paid out, all helping the fifth to draw it in and throw the fish into the large flat boat used for that purpose. The fish are then liberated alive in a large reservoir near to shore, where they are held prisoners by a loose stone wall through which fresh water passes until the next market day. At this their spawning time, these carp are certainly good esculent fish and much in demand on the Montreal markets. After the 30th June none are caught or seen until the next spring.

The question of prohibiting all netting in Lakes St. Louis and St. Francis, which are enlargements of the St. Lawrence, is under serious consideration. Such a measure, rendering any of the said fishing gear found in use liable to confiscation, would greatly facilitate the duties of the local officers. Although this apparently drastic measure would seem rather hard on a few regular fishermen who depend exclusively on this calling for a living, the general public would derive more benefit therefrom, and most of these interested parties could easily find other employment if they were only willing to work. Besides, night lines will not be included in the proposed prohibition, and many fishermen could secure fair catches by this mode of capture.

It is to be hoped that the department will extend a similar prohibition to all the inland waters of the Eastern townships. Of course nonetting is at present allowed without licenses, but a general prohibition by Order in Council for a stated period would have a better effect, and would strengthen the hand of the conscientious officers to detect and punish poachers. The beautiful lakes of the eastern counties, all of comparatively easy access within a short radius of Sherbrooke, and near the boundary line of the United



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States, have become attractive places of summer resort and sport. If proper protection be given to these numerous lakes, their popularity as sporting and resting places will yearly increase.

*Lake Memphremagog* is without doubt by far the largest sheet of water in the townships, being thirty miles long by one to four wide. It divides the counties of Brome and Stanstead, extending from Newport in the State of Vermont to Magog at its outlet. A line of steamers run all summer between the two above mentioned towns facilitating trade and distributing tourists at the various resorts dispersed on both shores of this important lake. Besides the renowned lunge, pickerel, pike, bass and whitefish are found quite plentiful in Lake Memphremagog. I fear that of late years this lake has not received the protection that its fishing importance should entitle it to. There are still some poachers, especially in the proximity of unsettled parts of its shores, and energetic guardians would be required to check and definitively master them.

*Little Magog Lake* is a mere expansion of Magog River, the outlet of Lake Memphremagog into the St. Francis River. It is nevertheless nine miles long by over one wide. It used to be a very fishy spot. Perch, pike, pickerel, bass, lunge and even speckled-trout are still caught therein by the numerous visitors from the town of Sherbrooke, which is only four or five miles distant from this lake skirted all along by the Canadian Pacific Railway.

*Lakes St. Francis and Aylmer*, although mere enlargements of the St. Francis River, are 15 and 8 miles long respectively by two or three miles wide. Though not far apart the larger lake is in Beauce and the other in Wolfe County. They still afford good fishing for maskinongé, doré, pike, bass and whitefish. There are no trout or lunge caught in these two lakes. No doubt some netting is still carried on for whitefish, &c., by the neighbouring settlers, and it is evident that this important part of the St. Francis lacks thorough protection.

*Lakes Massawippi* in Stanstead, and *Brompton* in Richmond, are also two beautiful lakes renowned for their fisheries as well as their picturesque scenery. The former is about 9 miles long and very deep. Its principal fishes are the so called black salmon, bass, doré, pike and whitefish. In Lake Brompton, which is more shallow but longer than the other, we find lunge, speckled-trout, pike, whitefish and some eels. The shores around this lake are not so much settled as the others above mentioned, and consequently more advantageous to the poachers, who are thus better screened from observation. Brompton Lake is about 14 miles drive from Sherbrooke.

*Lake Megantic* forms a part of the boundary between the counties of Compton and Beauce, and is only a few miles from the State of Maine. Although only twelve miles in length, owing to its indented shores, this lake has a coast line of about forty miles. It is the head of Chaudière River, emptying itself in the St. Lawrence, near Lévis. Fish are not so plentiful in Lake Megantic as formerly, but lunge, trout, bass and whitefish are still caught in fair numbers. The protection of this beautiful lake has been somewhat neglected of late, as there seems no particular guardian assigned for it at present.

Should regulations be enacted for the better protection of these inland waters, the seizure of the prohibited implements should be permissible on sight, wherever found, whether recently in use or not.

Respectfully submitted,

A. H. BELLIVEAU,  
*Inspector of Fisheries.*

## PROVINCE OF QUEBEC—Gulf of St Lawrence District.

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity and Value of Fish caught in the Province of Quebec, for the Year 1900.

## RESTIGOUCHE SUBDIVISION (Tide Head to Maguasha).

DISTRICTS.	FISHING VESSELS AND BOATS.			FISHING GEAR OR MATERIALS.						KINDS OF FISH.					Number.
	Boats.		Men.	Gill-nets.		Seines.		Trawls.		Salmon fresh, lbs.	Herring, salted brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	
	Number.	Value.		Number.	Fathoms.	Value.	Number.	Fathoms.	Value.						
<i>Bonaventure County.</i>															
1 Restigouche .....	25	\$ 400	20	30	5,500	\$ 4,000									1

## BONAVENTURE SUBDIVISION (Maguasha to Paspébiac).

1 Maguasha and Nouvelle .....	72	1,040	115	205	5,200	2,150	2	70	60		4,300	125	3,000	6,000	1
2 Carleton .....	105	1,200	180	320	7,000	3,600	4	130	100		8,200	240	5,000	9,000	2
3 Maria .....	160	2,125	260	500	11,500	5,800	3	90	78		12,150	300	8,000	15,000	3
4 New Richmond and Black Capes .....	51	625	90	135	3,050	1,600	1	30	25		15,950	150	3,500	3,000	4
5 Capelin .....	175	2,400	350	650	12,000	5,800	9	300	225	40	605	600	12,000	15,000	5
6 Bonaventure .....	280	3,850	420	950	16,000	8,000	30	1,000	750	36	9,750	1,000	20,000	25,000	6
7 New Carlisle .....	40	450	60	75	1,300	650	10	350	300	4	600	125	5,000	400	7
8 Paspébiac .....	190	3,400	350	400	7,000	3,400	40	1,400	1,000	120	600	400	12,000		8
Totals .....	1073	15,090	1825	3235	63,050	31,000	99	3,370	2,538	164	51,555	2,940	68,500	73,400	

## PORT DANIEL SUBDIVISION (Paspébiac to Point Macquereau).

1 Hopetown .....	42	1,590	65	72	1,080	940	9	180	150	30	580	220			1
2 Nouvelle .....	82	1,700	143	78	1,200	1,050	12	300	270	25	350	450			2
3 Shigawake .....	50	1,150	54	84	1,600	1,370	6	150	130	12	200	500			3
4 Port Daniel .....	172	5,160	265	250	3,200	2,425	20	500	400	65	525	1,180	4,500		4
5 Gascons .....	168	5,880	255	425	8,500	5,700	19	470	456	125	1,750	1,150			5
Totals .....	514	15,480	782	909	15,580	11,485	66	1,600	1,406	257	3,405	3,500	4,500		

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## RETURN showing the Kinds and Quantities of Fish, &amp;c.— Province of Quebec—Continued.

## RESTIGOUCHE SUBDIVISION (Tide Head to Magnasha).

Number.	DISTRICTS.	KINDS OF FISH.															TOTAL VALUE.	Number.	
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Fish oil, gallons.	Fish as bait, brls.	Fish as manure, brls.			
1	<i>Bonaventure County.</i> Restigouche.....	30							8,000	300,000	15	50,000					500	\$ cts. 25,370 00	1

## BONAVENTURE SUBDIVISION (Magnasha to Paspebiac).

1	Magnasha and Nouvelle..	80	1,200	2	6,000	25	35	450	3	200	3	200	425	500	8,000	2,200	3,914 90
2	Carleton..	35	75		500		11		800		30	800	25	70	4,300	4,300	6,518 60
3	Marie..	60			600				10,600		14	1,100	21	15	5,300	5,300	7,764 75
4	New Richmond and Black Capes	2												25	1,600		6,236 80
5	Capelin .....	10	1,200	2	6,000	25	35	450	3	200	3	200	425	500	8,000	2,200	14,037 25
6	Bonaventure.....	20	2,000	6	10,000	35	65	1,000	6,000		9	500	700	900	20,000	30,204 25	30,204 25
7	New Carlisle..	10	200		750	4		100	400	6,000		600	10	65	60	2,000	3,092 00
8	Paspebiac..		6,000	13	10,000	200	267	1,200	600	4,000	6	400	75	2,000	1,500	5,000	83,460 75
	Totals..	50	9,650	21	29,200	264	378	2,750	27,300	10,000	77	4,800	135	3,276	3,090	49,000	105,229 30

## PORT DANIEL SUBDIVISION (Paspebiac to Point Macquereau).

1	Hopetown.....		1,200	6		32							30	1,100	450	1,200	12,961 00
2	Nouvelle..		1,150	4		16							30	700	400	1,000	8,298 00
3	Shigawake..		580	2		19							12	350	260	1,200	7,172 00
4	Port Daniel .....		3,000	12		50				36,600		200	2,200	800	1,300	1,300	33,116 00
5	Gascons .....		5,000	22		150							450	3,000	1,150	500	31,701 00
	Totals.....		10,930	46		267				36,600			722	7,350	3,060	5,200	93,248 00

1-2 EDWARD VII., A. 1902

RETURN showing the Number and Value of Vessels, Boats and

County

GRAND RIVER SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.								
		Vessels.				Boats.		Gill Nets.			Seines.		Trawls.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
				\$			\$				\$			\$		\$
1	Newport.....				140	4500	500	360	7300	2880	3	100	70	120	1350	
2	Pabos.....				57	2865	147	113	2998	1498	5	166	185	32	320	
3	Grand River.....				200	8000	425	294	6304	2756	3	90	70	77	770	
4	Cape Cove.....				138	7625	422	480	10100	4926	5	150	115	82	820	
5	Percé and Bonaventure Island.....				143	8120	324	238	4700	1678	1	30	30	10	100	
6	Corner of Beach.....				25	780	50	56	1500	850	9	250	210	...	...	
7	Malbaie and Barachois.....				123	5900	243	225	4800	2150	20	248	375	...	...	
8	Point St. Peter.....	1	52	1250	10	76	2950	148	125	2350	1150	4	100	120	...	...
	Totals.....	1	52	1250	10	902	40740	2259	1891	40052	17888	50	1134	1175	321	3360

GASPÉ BAY SUBDIVISION

1	Chien Blanc to Sandy Beach.....				258	5116	350	210	4200	2100	10	300	200	...	...	
2	Gaspé North and South.....				45	900	65	100	2000	1000	24	720	480	...	...	
3	Peninsula and Little Gaspé.....				75	1500	150	125	2500	1250	2	60	40	...	...	
4	Grande Grève to Ship Head.....				73	1460	150	60	1200	600	7	210	140	...	...	
5	Cape Rosier to Jersey Cove.....				245	4900	390	100	2000	1000	2	60	40	...	...	
6	Griffin.....				120	2400	200	125	2550	1250	2	60	40	...	...	
7	Big and Little Fox River.....				205	4100	220	210	4200	2100	5	150	100	...	...	
8	Little Cape to Echourie.....				71	1520	80	65	1300	650	1	30	20	...	...	
9	Point Jaune to Fame Point.....				46	920	60	23	460	230	...	...	...	...	...	
	Totals.....				1138	22816	1665	1018	20410	10180	53	1590	1060	...	...	



## SESSIONAL PAPER No. 22

the Quantities of Fish, &amp;c.—Province of Quebec—Continued.

## of Gaspé.

(Point Macquereau to Point St. Peter).

KINDS OF FISH.										FISH PRODUCTS.					TOTAL VALUE.	Number.
Salmon, fresh, lbs.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			
4450	100	25250	7200	15	280	280	.....	.....	8400	300	3600	720	500	40,790 00	1	
16729	291	7290	3325	.....	85	25	.....	.....	6400	120	1662	332	200	21,475 65	2	
3950	1040	4800	10750	18	225	50	1000	.....	1500	324	5375	1075	600	54,873 50	3	
700	1238	29280	8890	10	40	.....	700	.....	.....	360	4445	889	300	51,055 00	4	
700	316	14400	9294	5	55	5	.....	.....	.....	324	4647	924	250	45,887 35	5	
13800	100	8640	1600	.....	.....	.....	.....	.....	.....	60	800	160	100	12,058 00	6	
10350	400	16200	8870	.....	.....	.....	.....	.....	.....	300	4435	887	100	46,301 00	7	
....	125	.....	5860	.....	.....	.....	.....	.....	.....	200	2930	586	100	26,548 00	8	
50679	3610	105860	55789	48	685	360	1700	.....	16300	1988	27894	5573	2150	298,988 50		

(Point St. Peter to Fame Point).

30000	600	14700	2400	.....	.....	.....	.....	650	.....	100	1200	240	200	22,225 00	1
32500	25	.....	.....	.....	.....	.....	.....	1000	95000	.....	.....	.....	.....	11,450 00	2
25000	250	3560	750	.....	.....	.....	1500	700	.....	50	375	75	50	10,382 00	3
3000	890	5000	1750	.....	.....	.....	2000	.....	.....	90	875	175	75	13,282 50	4
.....	550	2400	5700	10	.....	.....	4500	.....	.....	250	2850	570	150	28,815 00	5
.....	400	.....	4350	7	.....	.....	3000	.....	.....	200	2175	435	.....	21,475 00	6
.....	900	780	7800	10	.....	.....	3750	.....	.....	300	3900	780	150	39,046 00	7
.....	480	.....	2000	3	.....	.....	1200	.....	.....	120	1000	200	50	11,175 00	8
.....	400	.....	1500	3	.....	.....	1000	.....	.....	75	750	150	65	8,512 50	9
90500	4495	26440	26250	33	.....	.....	16950	2350	95000	1185	13125	2625	740	166,363 00	

1-2 EDWARD VII., A. 1902

RETURN showing the Number, Tonnage and Value of Vessels, Boats, &c.,

County of  
MONT LOUIS SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.					
		Vessels.				Boats.		Gill Nets.			Seines.		Trap Nets.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.
				\$			\$			\$			\$
1	Grand Etang to Chlorydorme...				52	1500	56	95	2375	1300	1	30	60
2	Petite Anse to Frégate Point...				95	1800	119	180	4500	2650	2	80	60
3	Great and Little Vallée...				55	1450	83	115	2775	1450	1	30	40
4	Magdalen...				45	600	56	60	1500	900			
5	Manche D'Epée and Gros Mâle...				35	400	51	35	875	400			
6	Anse Pleureuse to Rivière à Pierre				86	1600	117	145	3250	2700	3	90	100
Totals.....					368	7350	482	630	15275	9400	7	230	260

STE. ANNE DES MONTS SUBDIVISION

1	Claude Rivière.....				24	288	36	25	1150	690			
2	Marsoui and Martin River...				10	155	17	13	325	240			
3	Cape au Renard and Anse à Jean				8	108	13	9	260	178			
4	Ste. Anne.....				129	2800	186	214	6370	4100			
5	Cape Chatte.....				63	1340	89	80	1370	1325			
Totals.....					234	4691	341	341	9475	6533			

MAGDALEN ISLANDS

1	Entry Island.....				8	320	16	95	2720	570			
2	Amherst Island.....	2	25	550	8	146	5840	358	1815	47800	10890	8	1200
3	Allright ".....				126	2520	306	580	11600	2900			
4	Grindstone Island.....				217	10850	604	175	4230	1050	5	590	1760
5	Grand Entry ".....				42	840	126	36	720	180			
6	Gosse ".....				13	260	30	11	220	55			
7	Bryon ".....				3	60	6	4	80	25			
Totals...		2	25	550	8	555	20690	1446	2716	67370	15670	13	1790

## SESSIONAL PAPER No. 22

and Kinds of Fish, &amp;c.—Province of Quebec—Continued.

## Gaspé—Continued.

(Fame Point to Rivière à Pierre.)

KINDS OF FISH.																TOTAL VALUE.	Number.
Salmon, fresh, lbs.	Herring, salted, brls.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Halibut, lbs.	Trout, lbs.	Eels, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.		
120	300	...	300	2760	6	...	1900	100	...	200	...	1380	276	125	.....	14,274 50	1
1400	450	.....	.....	3280	13	.....	10000	800	...	200	...	1640	328	200	.....	18,294 00	2
800	400	.....	.....	2160	5	.....	7800	400	.....	150	.....	1080	216	60	.....	12,548 00	3
1850	150	.....	.....	680	2	.....	4000	.....	.....	50	.....	340	68	30	.....	4,529 00	4
1500	200	.....	.....	950	3	.....	1000	.....	.....	50	.....	475	95	50	.....	5,540 00	5
4000	1470	.....	.....	1460	6	.....	500	1000	.....	75	.....	730	146	160	.....	13,548 00	6
9670	2970	...	300	11290	35	...	25200	2300	...	725	...	5645	1129	625	.....	68,733 50	

(Rivière à Pierre to Cape Chatte.)

1700	374	...	...	620	...	...	3482	...	...	...	310	100	...	...	4,907 20	1
800	131	...	...	190	...	...	1200	...	...	...	95	40	...	...	1,652 50	2
...	240	...	...	76	...	...	70	...	...	...	38	35	...	...	1,334 90	3
7700	4071	...	...	2670	...	...	10530	4000	...	...	175	1335	200	170	31,092 50	4
4000	870	...	...	920	...	...	16316	4600	...	...	200	460	100	350	10,914 60	5
14200	5686	...	...	4476	...	...	31598	8600	...	...	375	2238	475	520	49,901 70	

## SUBDIVISION.

...	80	145	...	25	...	430	...	...	...	...	18	60	...	...	2,690 40	1
...	2920	2950	122640	2990	5	500	4400	...	75	...	1100	400	600	1200	97,678 00	2
...	3600	2288	145520	2876	10	75	5400	...	25	...	1060	1000	1200	13000	110,386 00	3
...	2500	2293	103152	510	...	15	...	...	2	...	225	1204	400	5000	75,633 90	4
...	945	128	154224	281	...	...	...	...	4	...	140	11600	200	250	55,608 30	5
...	433	129	4464	43	...	...	...	...	8	...	25	150	...	1500	6,919 30	6
...	50	18	65568	47	...	...	...	...	...	...	22	500	145	550	15,288 20	7
...	10528	7951	595568	6772	15	1020	9800	...	114	...	2590	14914	2545	21500	364,204 10	

1-2 EDWARD VII., A. 1902

RETURN showing the Number, Tonnage and Value of Vessels, Boats, &amp;c.,

County of

GODBOUT SUBDIVISION

Number.	DISTRICT.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.								
		Vessels.				Boats.		Gill Nets.			Seines.		Trap Nets.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
	<i>County Saguenay.</i>			¢			¢			¢			¢		¢	
1	Tadoussac to Jambons.....	3	55	1500	8	280	3500	188	254	11150	8200	2	160	150	.....	

## MOISIE SUBDIVISION

1	Ste. Marguerite.....	.....	.....	.....	.....	4	180	8	6	400	350	1	80	154	.....	.....
2	Seven Islands.....	2	66	1400	6	26	1430	40	20	1510	1240	4	203	190	.....	.....
3	Moisie.....	1	12	300	3	14	1200	28	42	4400	4300	3	150	120	.....	.....
4	Pigou.....	.....	.....	.....	.....	1	30	2	2	50	50	.....	.....	.....	.....	.....
	Totals.....	3	78	1700	9	45	2840	78	70	6360	5940	8	433	464	.....	.....

## MINGAN SUBDIVISION

1	River aux Graines to Thun- der River.....	.....	.....	.....	.....	95	4700	226	20	2000	1000	21	810	1395	4	2000
2	Dock Ridge Point and Jupitagan.....	.....	.....	.....	.....	15	815	34	10	750	500	5	145	225	.....	.....
3	Magpie.....	.....	.....	.....	.....	62	1900	134	20	1500	750	10	300	300	.....	.....
4	St. John River.....	.....	.....	.....	.....	66	2120	151	20	2000	1000	6	350	350	.....	.....
5	Longue Point, Mingan and Romaine.....	.....	.....	.....	.....	26	1170	51	8	1000	500	4	176	250	.....	.....
6	Esquimaux Point.....	5	223	2800	40	95	8400	155	15	600	1300	12	450	450	3	600
7	La Corneille.....	.....	.....	.....	.....	4	200	6	3	300	200	.....	.....	.....	.....	.....
	Totals.....	6	241	3100	43	363	19305	763	96	8150	5250	58	2231	2970	7	2600

## NATASHQUAN SUBDIVISION

1	Watsheeshoo to Agwanus... ..	.....	.....	.....	.....	42	2450	61	32	1040	690	6	450	300	.....	.....
2	Isle à Michon & Pashashaboo ..	.....	.....	.....	.....	4	250	8	.....	.....	.....	.....	.....	.....	.....	.....
3	Natashquan Village, River and Harbour.....	3	100	1500	24	94	3900	72	104	2380	1700	9	600	400	.....	.....
	Totals.....	3	100	1500	24	140	6600	141	136	3420	2390	15	1050	700	.....	.....



## SESSIONAL PAPER No. 22

and Kinds of Fish, &amp;c.—Province of Quebec—Continued.

## Saguenay.

(Tadoussac to Jambons.)

KINDS OF FISH.																	TOTAL VALUE.		Number.
Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, lbs.	Haddock, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	White whales, (Beluga) No.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	¢	cts.	
127000	....	1116	2000	916	10	..	11000	9000	2500	150	...	10	10100	400	350	347	41,021	75	1

(Jambons to Pigou).

5100	....	....	....	82	1	..	400	132	....	....	....	....	75	20	...	12	1,478	70	1
14000	....	14	....	735	12	..	9500	....	....	....	....	....	655	125	53	53	7,316	25	2
140000	....	25	....	629	7	..	10200	750	....	....	....	....	598	90	40	40	32,145	40	3
....	....	....	....	35	....	....	500	....	....	....	....	....	60	20	...	10	250	50	4
159100	....	33	....	1481	20	..	20600	882	....	....	....	....	1388	255	...	115	41,190	85	

(Pigou to Watsheeshoo).

2500	10	....	....	7200	15	..	20700	3900	....	....	117	....	5651	920	...	17	35,624	55	1
2700	8	....	....	1097	3	..	900	700	....	....	32	....	864	409	...	7	6,127	45	2
7500	...	30	..	3000	8	..	2400	600	....	....	36	....	2512	800	...	4	16,222	60	3
39549	....	....	....	3430	10	..	1500	4500	....	....	40	....	2733	843	...	6	24,581	70	4
9900	....	....	....	1540	4	..	6050	2500	....	....	28	....	1390	500	...	130	10,476	50	5
300	....	130	86400	1200	12	..	5500	....	....	....	36	....	1070	750	...	90	25,032	50	6
6000	....	....	....	....	....	....	1200	....	....	....	....	....	....	....	....	....	1,320	00	7
68449	18	160	86400	17467	52	..	37050	13400	....	....	289	....	14220	4222	...	254	119,385	30	

(Watsheeshoo to English Point).

11504	....	..	17604	1800	....	25	1000	100	....	....	....	160	1800	180	...	....	14,336	60	1
....	....	....	10560	....	....	....	....	....	....	....	....	....	....	....	....	....	2,112	00	2
18000	30	70	....	4800	...	25	1200	150	....	....	....	120	5000	480	...	120	26,350	00	3
29504	30	70	28164	6600	....	50	2200	250	....	....	....	280	6800	660	...	120	42,798	60	

1-2 EDWARD VII., A. 1902

RETURN showing the Number, Tonnage and Value of Vessels and Boats

County of

ROMAINE SUBDIVISION

Number.	FISHING VESSELS AND BOATS.							FISHING GEAR OR								
								Vessels.			Boats.			Gill Nets.		
	DISTRICTS.															
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.			
		\$			\$				\$			\$				
1	Kegashka River and Harbour . . . . .				8	400	16	12	350	120	1	50	50			
2	Musquaro to Romaine . . . . .	1	20	500	4	10	500	18	20	900	360	2	100	75		
3	Wolf Island and Coacoachoo . . . . .				10	300	25	10	300	150	1	200	150			
	Totals . . . . .	1	20	500	4	28	1200	59	42	1550	630	4	350	275		

## ST. AUGUSTINE SUBDIVISION

1	Wolf Bay to St. Mary's.....				13	260	12	15	750	500	1	50	40
2	Harrington .....				45	900	80	10	600	200	10	1300	650
3	Little Meccatina and Whale Head.....				35	700	54	15	1500	600	5	150	200
4	Mutton Bay .....				40	1000	60	20	1800	750	16	1000	500
5	Meccatina to Kekapoe.....				25	750	38	15	1500	750	3	100	100
6	St. Augustine .....				20	400	70	25	2000	750	5	150	150
7	Sandy Island to Chicatica.....				17	340	25	15	1500	750	4	120	120
	Totals.....				195	4350	339	115	9650	4300	44	2870	1760

## BONNE ESPERANCE SUBDIVISION

1	Nabitiippi to Burnt Island.....	1	25	400	3	32	1280	64	6	500	400	13	670	780
2	Bonne Esperance .....	1	99	2000	20	58	2560	116	10	750	500	6	550	900
3	Pidgeon Island to Salmon Bay.....					80	4000	164	10	290	255	9	903	1240
4	Little Fishery to Belles Amours.....					21	885	46	5	130	120	3	270	375
5	Bradore Bay to Blancs Sablons.....	4	287	5500	31	95	4200	182				11	960	1400
	Totals .....	6	411	7900	54	286	12925	572	31	1670	1275	42	3353	4695

## ANTICOSTI

1	Anticosti.....				43	1600	70	55	1350	675	7	350	300
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## SESSIONAL PAPER No. 22

and Fishing Materials, &amp;c.—Province of Quebec—Continued.

## Saguenay.

(Mont Joli to Coacoachoo).

MATERIALS.		KINDS OF FISH.													
Trap-nets.		Salmon, salted, brls.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	TOTAL VALUE.		
Number.	Value.														
	\$												\$	cts.	Number.
.....		20			500	.....	2000	1000	280	100	.....	10	2,846	50	1
1	400	25	.....	6000	750	.....	1000	1500	485	485	.....	25	5,729	25	2
1	400	.....	.....	24000	50	.....	.....	500	470	1490	.....	160	7,626	00	3
2	800	45	.....	30000	1300	.....	3000	3000	1235	2075	.....	195	16,201	75	

(Coacoachoo to Chicata).

8	2400	36			450			1500	650	100		65	2,916 25	1
8	2400	5		2880	3860				4060	400		70	17,996 50	2
10	2400	32		6864	2500			750	3100	250		200	13,482 80	3
7	2100	15		1920	4200				4000	600		66	19,591 50	4
1	250	50	16	1440	2700			2000	3500	200		532	14,117 00	5
1	200	30			2000			7500	2000	200		70	10,187 50	6
1	200	28		3940	500				500	75		20	3,495 50	7
35	9850	196	16	17044	16210			11750	17810	1825		1023	81,787 05	

(Chicatica to Blancs Sablons).

26	4800	45			1690			2000	2000	500		175	9,203 75	1
12	3600	140			5000			2200	4900	100			25,290 00	2
19	6500	56			5675				5655	1200			27,036 50	3
4	1200	10	40		1100				1030	100		150	5,356 50	4
34	11400	21	50		9950			400	14850	1000		1800	48,560 00	5
95	27500	272	90		23415			4600	28445	3800		2125	115,446 75	

## ISLAND.

.....	.....	20	220	38400	1150	10	3000	.....	1500	800	300	50	15,722 50	1
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RECAPITULATION.

Showing the Number of Vessels and Boats, Nets and all Fishing Materials, &c., in the Gulf Division, Province of Quebec, for the year of 1900.

COUNTY OF BONAVENTURE.

Number.	Divisions.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.											
		Vessels.			Boats.			Gill Nets.			Seines.		Trap Nets.		Trawls.		Weirs.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	
1	Restigouche .....	25	400	20	30	5500	4000	99	3370	2538	164	1530	257	3405	421	4935	1	2	3
2	Bonaventure .....	1073	15090	1825	3235	63050	31000	66	1600	1406	257	3405	421	4935	1	2	3	4	5
3	Port Daniel .....	514	15480	782	909	15580	11485	66	1600	1406	257	3405	421	4935	1	2	3	4	5
	Totals .....	1612	30970	2627	4174	84130	46485	165	4970	3944	421	4935	1	2	3	4	5	6	7

COUNTY OF GASPÉ.

Number.	DIVISIONS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.										Number.			
		Vessels.			Boats.			Gill Nets.			Seines.		Trap Nets.		Trawls.				Wairs.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.				
1	Grand River.....	52	1250	10	902	40740	2259	1891	40052	17888	50	1134	1175			321	3360	1			
2	Gaspé Bay.....				1138	22816	1665	1018	20410	10180	53	1300	1060					2			
3	Mont Louis.....				368	7350	482	630	15275	9400	7	230	260					3			
4	Ste. Anne des Monts.....				234	4691	341	341	9475	6533								4			
5	Magdalen Islands.....	2	550	8	555	20690	1446	2716	67370	15670	13	1790	4160	12	3900			5			
	Totals.....	3	77	1800	18	3197	96287	6193	6596	132582	59671	123	4744	6655	12	3900	321	3360			



## SESSIONAL PAPER No. 22

## COUNTY OF SAGUENAY.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1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RECAPITULATION.

Showing the Number of Vessels and Boats, Nets and Fishing Materials, &c.—Gulf Division, Province of Quebec—Continued.

COUNTY OF BONAVENTURE.—Continued.

DIVISIONS.	FISHING GEAR OR MATERIALS.			LOBSTER PLANT.				OTHER FIXTURES USED IN FISHERIES.						VALUE OF WHOLE FISHING GEAR.	Number.		
	Smelt Nets		Hand Lines.	Canneries.		Traps.		Freezers and Ice Houses		Smoke and Fish Houses.		Piers and Wharf.				Tugs Steamers and smacks	
	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.				
1 Restigouche.....	50	2500	3171	1385	5	825	5500	3600	111	30	1295	103	16675	2	20000	1	6,906 00
2 Bonaventure.....			4210	1133	8	2150	11100	5730	267	6	1050	45	1710			2	94,138 00
3 Port Daniel.....																3	43,699 00
Totals.....	53	2650	7381	2718	13	2975	16600	9330	378	36	2345	208	18385	2	20000		144,737 00

COUNTY OF GASPÉ.—Continued.

1 Grand River.....	4	200	3598	1799	14	3300	17700	8930	263	9	540	113	38600	15	3800	1	116,582 00
2 Gaspé Bay.....	10	500	4552	2275	11	2200	8400	4200	166	3	300	72	13500	16	6500	2	65,532 00
3 Mont Louis.....	962	1730	962	1730	1	200	250	125	6	.....	.....	14	7000	3	2000	3	28,065 00
4 Ste. Anne des Monts.....	660	.....	660	660	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	11,884 00
5 Magdalen Islands.....	2848	683	100	38241	100	38241	85065	50230	2176	5	250	76	14600	27	9300	20	161,074 00
Totals.....	14	700	12620	7148	126	43941	111415	63485	2611	17	1090	275	70700	61	21600	20	383,137 00



## RECAPITULATION

Showing the Kinds, Quantity and Value of Fish caught in the Gulf Division, Prov. of Quebec, for the Year 1900—Continued.  
COUNTY OF BONAVENTURE.—Continued.

DIVISIONS.	KINDS OF FISH.														Number.
	Salmon, fresh, lbs.	Salmon, salted or smoked, brls.	Herring, salted brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh lbs.	Haddock, dried, cwt.	Hake, dried, cwt.		
1 Restigouche . . . . .	30000	.....	100	12000	73400	.....	21270	30	9650	21	29200	264	378	1	
2 Bonaventure. . . . .	51555	.....	2940	68500	4500	.....	70660	50	10930	46	29200	267	.....	2	
3 Port Daniel . . . . .	20660	.....	3500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	
Totals. . . . .	111215	.....	6540	80500	77900	.....	91930	80	20580	67	29200	531	378		

## COUNTY OF GASPÉ—Continued.

Number.	DIVISIONS.	Salmon, fresh, lbs.	Salmon, salted or smoked, brls.	Herring, salted brls.	Herring, fresh, lbs.	Herring, lbs.	Herring, salted, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	Grand River	50679	.....	3610	.....	.....	.....	.....	105860	.....	55789	48	.....	685	360
2	Gaspé Bay	90500	.....	4495	.....	.....	.....	.....	26440	.....	26250	33	.....	.....	.....
3	Mont Louis	9670	.....	2370	.....	.....	.....	.....	300	.....	11290	35	.....	.....	.....
4	Ste. Anne des Monts	14200	.....	5886	.....	.....	.....	.....	.....	.....	4476	.....	.....	.....	.....
5	Magdalen Islands	.....	.....	10528	.....	.....	.....	7951	595568	.....	6772	15	.....	1020	.....
	Totals	165049	.....	27289	.....	.....	.....	7951	728168	.....	104577	131	.....	1705	360

## COUNTY OF SAGUENAY—Continued.

Number.	DIVISIONS.	Salmon, fresh, lbs.	Salmon, salted or smoked, brls.	Herring, salted brls.	Herring, fresh, lbs.	Herring, lbs.	Herring, salted, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	Godbout	127000	.....	1116	.....	.....	.....	.....	2000	.....	916	10	.....	.....	.....
2	Moisie	159100	.....	39	.....	.....	.....	.....	.....	.....	1481	20	.....	.....	.....
3	Mingan	68449	18	160	.....	.....	.....	.....	86400	.....	17467	52	.....	.....	.....
4	Natashquan	29504	30	70	.....	.....	.....	.....	28164	.....	6600	.....	.....	50	.....
5	Romaine	.....	45	.....	.....	.....	.....	.....	30000	.....	1300	.....	.....	.....	.....
6	St. Augustine	.....	196	16	.....	.....	.....	.....	17044	.....	16210	.....	.....	.....	.....
7	Bonne Esperance	.....	272	90	.....	.....	.....	.....	.....	.....	23415	.....	.....	.....	.....
8	Anticosti	.....	20	220	.....	.....	.....	.....	38400	.....	1150	10	.....	.....	.....
	Totals	38407.3	581	1711	.....	.....	.....	.....	202008	.....	68539	92	.....	50	.....









## RECAPITULATION

STATEMENT showing the Yield and Value of the Fisheries of the Gulf Division,  
Quebec, for the Season of 1900.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh in ice.....	Lbs. 660,317	0	20	132,063	40
" salted .....	Brls. 581	15	00	8,715	00
Herring " .....	" 35,540	4	00	142,160	00
" fresh .....	Lbs. 80,500	0	01	805	00
" smoked .....	" 77,900	0	02	1,558	00
Mackerel, salted.....	Brls. 7,951	15	00	119,265	00
Lobsters, canned.....	Lbs. 1,022,106	0	20	204,421	20
" fresh.....	Cwt. 80	5	00	400	00
Cod, dried .....	" 193,696	4	00	774,784	00
" tongues and sounds.....	Brls. 290	10	00	2,900	00
Haddock, fresh .....	Lbs. 29,200	0	03	876	00
" dried.....	Cwt. 2,286	3	00	6,858	00
Hake, " .....	" 733	2	25	1,660	50
Halibut, fresh .....	Lbs. 164,848	0	10	16,484	80
Trout " .....	" 91,532	0	10	9,153	20
Smelts " .....	" 460,400	0	05	23,020	00
Eels.....	Brls. 206	10	00	2,060	00
Tommy cods, fresh.....	Lbs. 54,800	0	05	2,740	00
Squid.....	Brls. 5,044	4	00	20,176	00
Coarse and mixed fish.....	" 665	2	00	1,330	00
Fish and seal oils.....	Galls 143,606	0	30	43,081	80
Fish as bait.....	Brls. 44,903	1	50	67,354	50
Fish as manure.....	" 61,930	0	50	30,965	00
Seal skins.....	Pieces 25,729	1	25	32,161	25
White whales, skins .....	" 150	4	00	600	00
Total for 1900 .....				1,645,592	65
" 1899 .....				1,523,578	95
Increase for 1899.....				122,013	70



## SESSIONAL PAPER No. 22

## RECAPITULATION

SHOWING Number of Men, Vessels and Boats, and Value of Material Employed in  
Gulf Division, Quebec, Fisheries, Season of 1900.

Description.	Value.
	\$ cts.
29 vessels of 982 tons manned by 160 men.....	18,000 00
6,189 boats fished by 11,030 men.....	179,577 00
280,012 fathoms of gill net.....	134,816 00
468 seines of 20,511 fathoms.....	21,913 00
151 trap-nets.....	44,650 00
784 trawls.....	8,587 00
18 weirs.....	380 00
140 smelt nets.....	4,940 00
24,633 hand lines.....	11,802 00
159 canneries employing 3,134 men and girls.....	50,676 00
134,985 lobster traps.....	76,300 00
75 freezers and ice houses.....	5,035 00
745 fish and smoke houses.....	112,685 00
216 private piers and wharfs.....	61,400 00
20 tugs and smacks. . . . .	2,800 00
Total.....	733,561 00

1-2 EDWARD VII., A. 1902

RETURN of the Number of Fishermen, the Number of Boats, Nets, &c., and the  
Cape Chat to Lévis, Province

Number.	DISTRICTS.	FISHING MATERIAL.								Salmon, lbs.	Shad, lbs.	Herring, salted, brls.
		Boats.			Gill Nets.			Eel Weirs.				
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.			
			\$				\$					
1	Capucins .....	15	210	23	13	340	170					200
2	Petits Mechins .....	33	385	40	34	880	380			300		359
3	Grands Mechins .....	29	310	34	39	830	480			1740		492
4	Ruisseau a Sem. ....	11	110	13	14	350	100					182
5	Grosses Roches.....	39	460	56	45	1125	550	4	100	140		480
6	Ste. Felicité.....	23	220	34	27	700	270	1	25			288
7	Matane.....	25	305	36	33	805	350	7	175	600		970
8	Rivière Blanche.....	27	450	28	35	925	370					450
9	Sandy Bay .....	75	1070	96	140	3985	1500	5	450			1420
10	Metis.....	7	100	10	3	75	40			1100		1200
11	Ste. Flavie.....	11	113	11	11	175	150					45
12	Ste. Luce.....	2	20	19	3	75	60	16	766	1760		50
13	Rimouski.....	8	150	18				18	1045	320		900
14	Sacré Coeur and Islet à Canuel .....	9	200	9				11	580	160		750
15	Bic, Cap à l'Orignal and Rivière Hatée.	3	15	17				12	380	790	15	200
16	St. Fabien, St. Simon and St. Mathieu.	1	5	5	1	25	10	5	120	300	60	1
17	Trois Pistoles.....	9	54	9				19	380	580	40	8
18	Isle Verte.....	35	1225	42				35	3185	1680	500	42
19	Cacouna.....	11	55	13				13	975	8022	397	50
20	Rivière du Loup .....	5	30	5				5	450	138		30
21	St. André and Notre Dame du Portage.	9	118	24				19	855	170	128	25
22	Kamouraska.....	7	36	8				9	1150	500	312	12
23	St. Denis.....	8	48	8				13	950	1000	240	25
24	Rivière Ouelle.....	36	200	46				18	1250	500	2000	
25	Ste. Anne de la Pocatière.....	8	40	8				18	500			
26	St. Roch.....	10	30	10				16	688			
27	St. Jean Port Joli.....	20	60	20				30	1948			
28	L'Islet.....	2	50	2				16	854			
29	Ile aux Grues and Ile aux Oies.....	5	25	13				13	665			
30	Cap St. Ignace.....	2	10	2	18	175	25	15	1862	160		
31	St. Thomas.....	6	30	10	2	60	7	12	925	64	180	
32	Berthier.....	10	50	10	1	110	7	40	2192	64	80	
33	St. Valier.....	9	115	9				9	5250	406	2150	
34	St. Michel.....	7	35	7				7	3750	296	150	
35	Beaumont.....	9	45	9	1	30	15	9	4400	240	350	
36	Lévis and St. Nicholas.....	10	50	10				8	3060	360	1390	
	Totals.....	536	6429	714	420	10665	4484	403	38930	21390	7992	8179
	Values .....	\$								4278	479	32716

## SESSIONAL PAPER No. 22

Quantity of Fish Caught on the South Shore of the St. Lawrence River from of Quebec, for the Year 1900.

KINDS OF FISH.										FISH PRODUCTS.		TOTAL VALUE OF FISH.	Number.
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Sturgeon, lbs.	Eels, lbs.	Cod, (green) lbs.	Halibut, lbs.	Sardines, brls.	Mixed and coarse fish, lbs.	Seal skins, No.	Fish oil, galls.	
							41000	3300					\$ cts.
		300					62100	3050		1100		90	3,180 00 1
							42100	1460		200		15	4,974 00 2
							21100	2000		1000		80	4,573 50 3
		130					55000	4650		62000		225	2,017 00 4
							28800	4000		1600		120	5,863 50 5
		1100					4000	2600		1500		110	3,044 00 6
							24700	1450		1700		125	4,618 00 7
							18200	2670		2800		210	3,234 50 8
										5000			6,948 00 9
										2600			5,070 00 10
39800									208	1000			604 00 11
18400		25							5	3500			1,372 50 12
649500						2800			100	3200			10,377 00 13
324850									10	820	16	25	6,612 50 14
250000									3	100			3,524 60 15
		3500				2009				3			548 14 16
1000					60	900			316	16160	+6	560	1,519 60 17
*320210					500				101	127500			6,044 10 18
108200									2056	28400			9,362 22 19
24500					809	740			85	5000	5	10	799 79 20
4500						30			90	4000			498 48 21
9500					5000	100			893	1000			3,256 72 22
34000						2422			125	1000			1,184 72 23
200000					60000	6400			500	10000	+12	1120	8,188 00 24
		20000				3253				1000			2,205 18 25
		10000				6125				1800			385 50 26
						5123				1000			1,317 38 27
						11320				1200			691 20 28
						20555				1300	12	20	2,867 30 29
						11136				1500			6,919 66 30
										615			1,033 76 31
	450		1000	665	7330	6916				750			3,331 46 32
	700		735	50	5700	47451				2253			5,816 05 33
	19320		2665	2570	11600	50000				850			3,050 95 34
	270		1015	141	340	47400				800			2,690 00 35
	260		1120	360	410	41000				1350			7,658 11 36
	600		1635	575	1550	119811							
1984460	21600	35055	28245	4611	196399	385491	297000	25180	4492	295600	33	2710	
19845	1728	3505	2260	230	11784	23129	14850	2518	13476	2956	41	813	135,381 42

\* 35,000 lbs. smoked herring.

+ 18 belugas or white whales, \$72.





## SESSIONAL PAPER No. 22

Value of Fish, &c., in the Inland District extending from Quebec City to Upper Quebec, for the Year 1900.

KINDS OF FISH.													TOTAL VALUE.	Number.
Shad, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Tom Cod, bush.		
500	500	...	1500	8000	3000	1000	2000	10000	8000	2000	65000	.....	\$ cts.	
400	600	2000	7400	70000	60000	5000	8400	82400	75300	90300	510000	.....	2,420 00	1
900	.....	.....	3500	50200	55600	5400	17300	40600	56000	43300	200000	.....	21,677 00	2
.....	.....	.....	7350	8800	22550	.....	1950	90500	23700	.....	60800	.....	13,412 00	3
500	.....	.....	2500	5500	23000	3100	4500	21600	27000	2300	61000	.....	8,795 00	4
800	.....	.....	4500	17400	29200	600	21500	28400	89200	14400	203000	.....	4,643 00	5
.....	.....	.....	7000	11300	14200	4500	160600	21900	37700	20000	176400	.....	10,470 00	6
.....	.....	.....	2200	6500	6800	2500	12400	5000	7000	5800	15200	.....	16,208 00	7
.....	4000	88000	40500	45000	47100	12600	56300	14800	27500	54200	88000	.....	2,445 00	8
400	.....	.....	2300	6900	9300	4500	6900	5200	39700	78400	83400	.....	24,305 00	9
12100	.....	72600	500	2500	3100	450	700	1100	4500	900	19700	.....	5,514 00	10
10300	2000	7000	1800	5600	21000	8000	9000	61800	20100	65400	130000	.....	8,760 00	11
4000	.....	16500	600	5900	3400	.....	6500	5000	2000	8000	12500	26000	10,681 00	12
.....	15400	120000	5000	41600	27300	.....	.....	2800	10000	4000	39000	.....	19,004 00	13
.....	500	.....	.....	39300	.....	.....	450	.....	.....	.....	72600	.....	17,742 00	14
29900	23000	306100	86650	324500	325550	47650	308500	391100	427700	389000	1736600	26000	2,758 00	15
1794	1840	30610	6932	16225	13022	2859	18510	23466	12831	7780	17366	.....	168,835 00	

NORTH SHORE OF THE ST. LAWRENCE FROM QUEBEC CITY TO  
THE SAGUENAY.

*Island of Orleans.*—There are over one hundred weirs set around the shores of Island of Orleans. They are mostly built of wire netting and are valued at \$12,000. Besides a few night lines these weirs constitute all the fishing gear of the locality. Of late years the spring caught fish have been so scarce that fishermen now only set their weirs late in the season, mostly for eels. The capture of shad, bass and pickerel has now become too insignificant to mention, and their catch is included in that of the mixed fish. On the other hand more eels were caught than before; their yield is given at 260,000 pounds, that of coarse and mixed fish at 35,000 pounds. About 300 pounds of salmon were also caught in these weirs—The whole catch valued at \$16,010.

On the main shore of Montmorency County there are about thirty weirs valued at \$3,000. Eels here also are the principal kinds of fish, 80,000 pounds being secured, besides 2,000 pounds of trout and 5,000 pounds mixed fish, valued at \$5,080 altogether.

In Charlevoix County the seventy-five weirs are not so expensive as the above mentioned, but are mostly constructed with brushes called *fascines*, and are only valued at \$1,500. There are also four gill nets valued at \$60. The yield of fish for this county is reckoned as follows:—36,500 pounds of eels, 200 barrels of sardines, 25 barrels of herring, 1,700 pounds of salmon, 175,000 pounds of mixed fish, besides 1,000 barrels of fish used as manure, aggregating a value of \$5,480.

In Lake St. John District, comprising the upper waters of the Saguenay, the catch of fish is estimated as follows:—10,000 pounds of salmon, 6,000 pounds of whitefish, 12,000 pounds of trout, 75,000 pounds of ouananich, 23,000 pounds of pickerel, 5,000 pounds of pike and 40,000 pounds of coarse and mixed fish—In all representing a value of \$12,930.

The statistics on the coast from Tadoussac to Bersimis have been included in the Godbout district of the Gulf division.

## SESSIONAL PAPER No. 22

## STATEMENT

OF the Yield and Value of the Inland Fisheries of Quebec (exclusive of the Gulf Division) for 1900.

Kinds of Fish.		Quantity.	Price.	Value.
			\$ cts.	\$ cts.
Salmon	Lbs.	33,390	0 20	6,678 00
Shad	"	37,892	0 06	2,273 52
Herring, salted	Brls.	8,204	4 00	32,816 00
" fresh	Lbs.	1,984,460	0 01	19,844 60
" smoked	"	35,000	0 02	700 00
Whitefish	"	50,600	0 08	4,048 00
Trout	"	355,155	0 10	35,515 50
Ouananiche	"	75,000	0 10	7,500 00
Bass (Achigan)	"	114,895	0 08	9,191 60
Pickarel	"	352,111	0 05	17,605 55
Pike	"	330,550	0 04	13,222 00
Maskinonge	"	47,650	0 06	2,859 00
Sturgeon	"	504,899	0 06	30,293 94
Perch	"	427,700	0 03	12,831 00
Eels	"	1,153,091	0 06	69,185 46
Sardines	Brls.	4,692	3 00	14,076 00
Halibut	Lbs.	25,180	0 10	2,518 00
Cod (green)	"	297,000	0 05	14,850 00
Tom cod	Bushels	26,000	0 60	15,600 00
Catfish	Lbs.	389,000	0 02	7,780 00
Mixed fish	"	2,287,200	0 01	22,872 00
Fish as manure	Brls.	1,000	0 50	500 00
Seal skins	No.	33	1 25	41 25
Beluga skins (white whales)	"	18	4 00	72 00
Fish oil	Galls.	2,710	0 30	813 00
Total for 1900				343,686 42
" 1899				429,555 36
Decrease				85,868 94

## STATEMENT

SHOWING the Fishing Material used in Quebec (exclusive of the Gulf St. Lawrence Division) for the Year 1900.

Articles.	Value.	Total.
	\$ cts.	\$ cts.
1,294 Fishing boats	15,554 00	
832 Gill nets (22,200) fathoms	7,789 00	
188 Seines (4,915 " )	3,055 00	
823 Hoop nets	6,215 00	
616 Brush or eel weirs	59,930 00	
25 Nasses	50 00	
878 Night lines	1,715 00	
		94,308 00
50 Ice houses		3,000 00
Total		97,308 00

1-2 EDWARD VII., A. 1902

## RECAPITULATION

Of the Yield and Value of the Fisheries in the whole Province of Quebec, for the Year 1900.

Kinds of fish.	Quantity.	Rate.		Value.		Total Value.
		\$	cts.	\$	cts.	
Salmon, fresh.....	Lbs. 693,707	0	20	138,741	40	147,456 40
" salted.....	Brls. 581	15	00	8,715	00	
Trout.....	Lbs. 446,687	0	10			44,668 70
Ouananiche.....	" 75,000	0	10			7,500 00
Whitefish.....	" 50,600	0	08			4,048 00
Smelts.....	" 460,400	0	05			23,020 00
Cod, dried.....	Cwt. 193,696	4	00	774,784	00	792,534 00
" (green).....	Lbs. 297,000	0	05	14,850	00	
" tongues and sounds.....	Brls. 290	10	00	2,900	00	
Haddock, dried.....	Cwt. 2,286	3	00	6,858	00	7,734 00
" fresh.....	Lbs. 29,200	0	03	876	00	
Hake, dried.....	Cwt. 738	2	25			1,660 50
Tom cod.....	"					18,340 00
Halibut.....	Lbs. 190,028	0	10			19,002 80
Herring, salted.....	Brls. 43,744	4	00	174,976	00	197,883 60
" fresh.....	Lbs. 2,064,960	0	01	20,649	60	
" smoked.....	" 112,900	0	02	2,258	00	
Sardines.....	Brls. 4,692	3	00			14,076 00
Shad.....	Lbs. 37,892	0	06			2,273 52
Bass (achigan).....	" 114,895	0	08			9,191 60
Pickarel.....	" 352,111	0	05			17,605 55
Pike.....	" 330,550	0	04			13,222 00
Maskinonge.....	" 47,650	0	06			2,859 00
Eels, fresh.....	" 1,153,091	0	06	69,185	46	71,245 46
" salted.....	Brls. 206	10	00	2,060	00	
Perch.....	Lbs. 427,700	0	03			12,831 00
Sturgeon.....	" 504,899	0	06			30,293 94
Mackerel, salted.....	Brls. 7,951	15	00			119,265 00
Lobsters, canned.....	Lbs. 1,022,106	0	20	204,421	20	204,821 20
" fresh.....	Cwt. 80	5	00	400	00	
Squid.....	Brls. 5,044	4	00			20,176 00
Catfish.....	Lbs. 389,000					7,780 00
Coarse and mixed fish.....	" 2,287,200			22,872	00	24,202 00
" ".....	Brls. 665			1,330	00	
Fish as bait.....	" 44,903	1	50			67,354 50
" manure.....	" 62,930	0	50			31,465 00
Fish oil.....	Galls. 146,317	0	30			43,894 80
Seal skins.....	No. 25,762	1	25			32,202 50
Beluga or white whales skins.....	" 168	4	00			672 00
Total for 1900.....						1,989,279 07
" 1899.....						1,953,154 31
Increase.....						36,144 76



SESSIONAL PAPER No. 22

## RECAPITULATION

OF the Fishing Vessels, Boats, Nets, &c., in the whole Province of Quebec, for the  
Year 1900.

Articles.	Value.	Total.
	\$	\$
29 fishing vessels (982 tons).....	18,000	
7,483 " boats.....	195,131	
12,400 gill nets (302,212 fathoms).....	142,605	
656 seines (25,426 " ).....	24,968	
151 trap nets.....	44,650	
823 hoop nets.....	6,215	
634 weirs.....	60,310	
140 smelt nets.....	4,940	
784 trawls.....	8,587	
24,633 hand lines.....	11,802	
878 night lines.....	1,715	
25 nasses.....	50	
		508,973
159 lobster canneries.....	50,676	
134,985 " traps.....	76,300	
		126,976
125 freezers and ice houses.....	8,035	
745 fish and smoke houses.....	112,685	
216 fishing piers and wharfs.....	61,400	
20 tugs and smacks.....	2,800	
		184,920
Total.....		820,869

1-2 EDWARD VII., A. 1902

## APPENDIX No. II.

## BAIT COLD STORAGE.

REPORT OF PROGRESS ON THE BAIT STORAGE WORK IN 1901, BY  
THE SPECIAL OFFICER IN CHARGE, J. F. FRASER.

NEW GLASGOW, N.S., December 29, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—As the end of the bait season is approaching, I beg to make the following report on the condition of the bait freezers, and the work under my charge in the maritime provinces. The cold storage work which has been done up to the present time, has been confined to the provinces of Nova Scotia and Prince Edward Island. The work in Prince Edward Island has been mainly at the western end of the province, while the work in Nova Scotia has been confined principally to the eastern end. An effort has been made from time to time, to extend the work into the province of New Brunswick, but heretofore without success. An association was formed at Caraquet, on Chaleur Bay, for the purpose of building a thirty ton freezer, but construction was not commenced. Arrangements were completed for the erection of freezers at Tracadie, Point Escuminac and Richibucto. Some difficulty has arisen at these points, and I am not sure that these freezers will be built.

In the early stages of the work, Dr. Arthur Kendall, while inspector of bait freezers, visited the New Brunswick shore of the Bay of Fundy, including Grand Manan, but no definite arrangements have resulted up to the present time.

Inquiries were received from the province of Quebec, including the Magdalen Islands, for the establishment of cold storage stations, both on the mainland and on the islands, but, owing to the fact that the local legislature of Quebec did not deem it advisable to pass, at its last session, a special act for the free incorporation of bait associations, as has been done in Nova Scotia, Prince Edward Island and New Brunswick, it has been impossible to organize any fisherman's bait associations in that province.

The majority of bait association meetings will be held during the present month and some in the early part of January, when a final and detailed report can be made for the whole seasons operations.

As an evidence of the success that has attended some of the freezers, application has been made to the department for extension of capacity. The extension to the Bay-field freezer is now under way, and an application has gone forward for a similar extension to the Sambro freezer. The fishermen in these localities have stated, that at first they viewed the matter, more or less, as an experiment, and were not willing to embark heavily until they were assured of its success.

Since forwarding my last report the following freezers have been completed :—

Locality.	Province.	County.	Capacity.
			Tons.
Miminigash.....	Prince Edward Island. ....		10
Cheticamp.....	Nova Scotia.....	Inverness.....	20
Eastern Harbour.....	" .....	" .....	20
Petit de Grat.....	" .....	Richmond.....	20

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Construction is under way at North Bay, Ingonish, Victoria Co., N.S., 20 tons capacity and an extension to freezer at Bayfield, Antigonish Co., N.S. It is possible, that arrangements may yet be made, to build a 20 ton freezer at Port Maitland, in Yarmouth Co., and at New Haven, in Victoria Co.

## DETAILS OF NEW CONSTRUCTION.

*Miminigash, P.E.I.*—This freezer is of the same size as the one built at Bayfield. The storage room is divided into two portions, however, which will enable it to be run more economically. The ice chamber has been enlarged and an additional ice storage has been placed in the freezing shed, for the supplying of ice for freezing the bait in the spring, without drawing on the main ice supply. The bait will be frozen in pans at this point.

*Cheticamp, C.B.*—A 20 ton freezer has been completed at this point, and, having a few tons of ice available, some squid have been frozen as a test charge.

*Eastern Harbour, C.B.*—This freezer has been completed, but the accounts have not yet been received. The size is the same as the Cheticamp freezer, 20 tons, but the material used in the construction is of a better quality, which will add slightly to the cost of the building; it is expected, however, that the operating expenses will be rather less. These two freezers which were erected within a short distance of each other, should be of considerable benefit to the large fishing settlement of Cheticamp. I am of the opinion, that, by dividing the bait cold storage required between two freezers, that it will better serve the needs of the locality than by erecting one large freezer, as the fishing settlement is scattered for some distance along the shore.

*Petit de Grat, C.B.*—A 20 ton freezer has been completed at this point and is provided with a full equipment of ice tools. A small stock of ice was cut last winter and held in temporary storage by the association, but sufficient provision was not made for keeping it and it is not expected that this freezer will operate until next year.

## FREEZERS UNDER CONSTRUCTION.

*North Bay, Ingonish, C.B.*—A 20 ton freezer is now under construction at this point, and I expect it will be completed by the New Year. Ingonish is a good fishing locality, and, if properly managed, the catch should be materially increased.

*Bayfield (Extension), N.S.*—Owing to the need of extending this freezer, the ice chamber of the original freezer is being converted into storage and freezing rooms, and a detached ice house is being built for the purpose of supplying ice for freezing and storing the fish frozen. This extension should be completed early in the new year.

A freezer at Neil's Harbour, C.B., was constructed by private enterprise from plans furnished by the department, and in my report for last year I made mention of its operations up to that time. I am to-day in receipt of a letter from the owner, Mr. M. G. McLeod, of Baddeck, in which he says: 'We have the cold storage at Neil's Harbour filled with herring we imported from Newfoundland. If we will only get fine weather now we will be sure of as many codfish as we can handle. December is always the best codfish month and the scarcity of bait the drawback.'

The following detailed reports will give the results of the operations of the freezers. Where the annual meetings have been held the reports are more complete:

*Alberton, P.E.I.*—The season at this station has been successful, and a marked improvement over last year. A small quantity of bait was stored, but has all been sold locally and to the Caraquet fishermen. The annual meeting should be held shortly, when I have been promised by the directors a detailed statement of the operations for the year.

*Frog Pond, P.E.I.*—This was our most successful bait freezer last season, and was equally successful during the first half of the present year. The directors decided to



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freeze a smaller quantity of herring than had been frozen before, and for this purpose converted the freezing room into a small storage room by removing the cooling retorts from one side, the fish being pan frozen. Entering this room for bait twelve to fifteen times daily in July, they found it impossible to keep the temperature sufficiently below freezing, and their bait gave out. This proved a loss to them, but it should not have occurred. Had I been notified by telegraph I could have advised them and saved the bait. I do not anticipate a similar difficulty at this point again. The annual meeting will be held in a few days.

*Souris, P.E.I.*—The work at this station this year has been a failure, and I do not at present foresee much hope of making it a success. It is true that the directors missed the first heavy run of fish (herring), and froze but few barrels. They found, however, that they could not dispose of this frozen bait to the fishermen, who were prejudiced against it, and that the usual demand for bait from vessels was not forthcoming. I hope to attend the annual meeting this month, and after seeing the directors will be able to give further particulars.

*Ballentyne's Cove, Antigonish County, N.S.*—I have to report a successful season at this station, and the contrast is bright compared with last season. During that season, owing to the ice supply being insufficient, it was necessary to convert a quantity of bait to other purposes; moreover, the fishermen complained of the quality of same (the bait), stating it was not satisfactory. This year every pound stored has been used with good results, and the fishermen are thoroughly satisfied with its quality. The fish obtained, that would not otherwise have been landed, is evidence of the benefit of the freezer at this point. The annual meeting will be held this month.

*Bayfield, Antigonish County, N.S.*—Satisfactory results have been obtained at this station, so much so that the directors have asked the department and have been granted permission to extend the freezer, which extension is now under way and reference has been made to it above. On the 26th ult. I received the following letter from the president of the association, Mr. Charles L. Gass:

‘Our freezer worked in a very satisfactory manner during the past summer. As in all other things, the first year was more of an experiment than otherwise. With us, at the start, the fishermen were very doubtful as to the value of frozen bait, but when they had a trial of it they found it to be as good as a fresh caught article. In October, when there was no live bait to be had, boats which baited with 50 to 100 pounds from the freezer caught from 500 to 900 pounds of codfish at a setting; this they could not have taken had there been no frozen bait. The freezer in future will prove of even a greater benefit to our fishermen.’

*Port Hood Island, Inverness County, C.B.*—The spring run of herring at this point was small and few barrels were frozen, but, as at Souris, the fishermen did not use them. Later in the season, when the squid appeared, a quantity was frozen and used, proving good bait. On the whole, the results were neither satisfactory nor the reverse. Some trouble was experienced with the ice chamber, causing meltage of ice, which will be remedied before another season.

The usual number of men did not fish at this station, which is considered a good one, the industrial development of Cape Breton having drawn many fishermen into other employments, railroad building and mining principally. I look forward, however, to more success here in the future.

*Whitehead, Guysborough County, N.S.*—The experience here is almost a duplicate of that at Port Hood Island, except that the population is a purely fishing one and has not been drawn on by other occupations, as at Port Hood.

*Gabarous, C.B.*—I advised the directors not to freeze herring, which appear first in Gabarous Bay, but to reserve their efforts for squid, which come later. This they did, freezing a quantity of the first run. These sold to vessels for \$6 per barrel, netting the fishermen a good profit. Had they retained them for their own use, when bait became scarce, they would have been much more valuable. One man was reported to have caught \$54 worth of fish with \$3 worth of bait.



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This association did not take the necessary precaution of covering its ice, and its lost will probably cause a deficit this year. The location is good and with careful management this freezer should be a success.

*Port Beckerton, Guysborough Co., N.S.*—I am of the opinion that the situation at this station is not satisfactory, the shareholders are divided into several groups and are not working in harmony; I do not see how success can be had until co-operation among the shareholders is attained. During the past season a quantity of bait and fish were frozen, and some bait used. More ice was lost, through neglect to cover properly, than was used. I have looked carefully into the fishing conditions at this point, and am convinced, that as soon as the freezer is in the hands of an undivided management and carefully run, it will prove its use to the fishermen. The population are dependant solely on the fisheries. They are building small vessels, to prosecute their calling, further off the coast, and the freezer is the one thing necessary. I hope for better results next season.

*Sambro, N.S.*—I recently made an inspection of the freezer at this point and found everything in a thoroughly satisfactory condition. The association have now stored for winter fishing about 25 tons of squid, these have been crate frozen and are in excellent condition.

The stock of bait in store at Halifax, is, I am informed, small, compared with that generally put up and the squid at Sambro will be very valuable to the fishing fleet at that point. This is the first freezer, which has been filled to the utmost capacity with bait, and the directors have asked for an extension of space. I am very glad that the matter has been so satisfactory at this point. It stands at the entrance to Halifax harbour, and it would be difficult to select a locality where favourable results would better advertise bait cold storage or unsatisfactory results condemn it, as at this place.

*Port La Tour, Shelburne, Co., N.S.*—(30 tons capacity) The annual meeting of this association was held on the 29th ultimo, at Port La Tour, at the Odd Fellows Hall, and the directors presented a statement of the affairs of the association. The results for the year were unsatisfactory and the year ended leaving the association in debt, owing to the loss of their ice supply, due principally to the fact, that the bed of the ice house was not properly prepared by the foreman in charge of construction. The association, however, delayed commencing building until the winter had set in and owing to the lateness of the season, in order to store ice, every effort had to be made to rush construction. The freezer is a 30 ton one and if properly managed cannot fail to be a benefit to the locality. This association is composed entirely of fishermen, and is the only bait association that has not on its directorate one or more merchants or business men. At the annual meeting considerable difference of opinion was manifested among the directors and shareholders, as to the conduct of the business for the year. I am of the opinion that the management should be concentrated in the hands of one managing director, instead of being distributed among several, as it is here at present, and that greater harmony must exist among the shareholders at this point, before the freezer can prove the benefit it should. The location is a good one, the freezer is satisfactory, and time will demonstrate what can be done here.

*Clarke's Harbour, Shelburne Co., N.S.*—(25 tons capacity.) The annual meeting at this point has not yet been held, but will be called shortly. The situation here is somewhat similar to that at Port La Tour, but not as pronounced. A quantity of bait has been frozen and used with excellent results, and a considerable loss of ice has taken place for the same reason at Port La Tour. The directors are satisfied as to the ultimate benefit of the freezer, and I expect a letter to this effect. The ice chamber will be placed in good order, and arrangements made after the annual meeting to prepare for next season's work. The location here is good, as at Port La Tour the fishermen are industrious and energetic, and will undoubtedly make the most of this aid to their work. They express the opinion that it is 'the handiest thing yet, and the bait is as good as if just caught.'

*Lower East Pubnico, Yarmouth Co., N.S.*—(50 tons capacity.) The season at this station has been very satisfactory, so far the only difficulty experienced has been to

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obtain sufficient bait fish, but hopes are entertained that a supply may yet be available. Squid is reported plentiful at Port La Tour, and the president of this association, under date of November 30, writes:—

‘I have written Port La Tour to see if they can get us 40 tons or more of squid.’

I am also in receipt of the following letter from Mr. H. T. D’Entremont, the president:—

‘L. E. Pubnico, Nov. 26, 1901. We had our freezer finished enough to put in our ice, 300 tons, by the 15th February, and all completed by the 1st March. We expected to freeze 75,000 to 100,000 lbs. mackerel in May, but did not get any mackerel to speak of, only got 1,400 lbs.; they were only worth about three cents in Boston, and sold them out of freezer at nine cents each, which would show the advantage of the cold storage plant, being able to procure fish when low, and holding them until the price advances or when there is a demand for them. There were very few herring caught in our immediate vicinity; only froze about 75 brls. herring, most of which are in freezer for next spring’s fishing. Have not been able to procure squid. Could sell 200 or 300 tons of squid, if we could get them. Have every confidence in cold storage; it is one of the best things that the Government could do to help the fishermen. When plants are located along the shores, fishermen need lose no time in waiting for bait, and should be the means of a much larger catch of fish, which means a more profitable business. I am yet in hopes that we may procure squid to fill the freezer.’

The ice supply has kept well at this point, and meltage has been light. About ten tons bait have been frozen to date.

*Sandy Cove, Digby Co., N.S.*—(20 tons capacity.) This freezer was completed in July last, a supply of ice was carried in temporary storage in the spring, and afterwards transferred to the ice chamber, but not in sufficient quantity to warrant the operation of the freezer this fall. It has a large ice house, two storage rooms, freezing chambers and full equipment of tools.

#### REMARKS.

Reviewing the season’s operations, I wish to emphasize several points in the working of the bait cold storage proposition. The freezers themselves have given us no trouble. The fish have been well frozen and have kept in good condition. We have had difficulty in several places owing to an excessive meltage of ice. In two instances this may be attributed to the lack of proper care on the part of the constructing foreman; in the other cases, it was largely due to carelessness on the part of the associations themselves, in not, after harvesting the ice, covering it with straw or sawdust.

I have endeavoured to impress on the associations the necessity of using the utmost care to preserve their ice, as a failure of the ice supply, when bait is in the freezer may entail a serious loss.

It has been found in localities, that some of the fishermen shareholders do not put bait into the freezer on their shares, although knowing well that a scarcity will be felt later. This may be partly attributed to the fact that when bait is plentiful, they will merely catch enough for their immediate requirements and devote their time to catching food fish.

The directors under the general regulations are empowered to provide this quantity, but have generally no funds available for the purpose, and hesitate to incur the expense. Hence it often happens, that a small quantity of bait is stored, when a larger amount should be frozen. This a very important item as it costs practically as much to run a freezer for 5 tons of bait as it does for 20 tons. The fixed charges for ice and labour being the same, while the charges for salt is nearly as much. The revenue of a freezer on the other hand, freezing charge and government bonus, is directly proportional to the amount of bait frozen and stored.

I am satisfied that the fishermen, where they have had a chance to test the matter, appreciate the benefit of a freezer but I also think that it will be difficult to get them to co-operate well enough together to make the business as great a success as it undoubtedly can be made. In the hands of ‘one man’ management the freezers can be operated



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cheaper and more carefully looked after than by the present arrangement of a board of directors, and I am of the opinion that this will of necessity occur in many places.

I am fully satisfied after an observation of two years, that the project of aiding the establishment of freezers for bait, has been of benefit to the fishermen and will be of much more advantage in the future.

There is a side to the work which has not often been touched on, namely, the educational phase of the question. That a strong prejudice has existed against the use of frozen bait around the shore of the Maritime provinces, no one can deny, who has any knowledge of the fishing communities around the coast. Wherever freezers have been erected and worked properly this prejudice has been removed, and a feeling of confidence in the preserved bait replaced the feeling of distrust.

I believe that when the time comes that the active work of aiding the fishermen in this matter, ceases, that the information gained should be published in convenient form, accompanied by plans of freezers of various sizes together with bills of material, and this phase of the work continued at small expense.

It has been found that the fishermen in each locality, where the department's offer has been taken up, have endeavoured to erect as large freezer as their means would permit, and I have found in a number of cases that after the building was finished that either no funds were available for running expenses or that a deficit on account of construction resulted. This has crippled some of the associations operating this season for the first time. In nearly every locality the size of the freezer erected is larger than is sufficient to supply the needs of the shore fishermen, and the directors depend on supplying the bankers with bait.

The surplus of bait over and above the needs of the locality, small as that might be, would suffice for but few vessels. Several bankers could take all the surplus bait from a medium sized freezer (20 tons). Many captains will hesitate about running into a port where such a freezer is, lest they be unable to get a baiting, preferring to take chances and spend more time endeavouring to get fresh bait.

It appears that there are two distinct classes of fishermen who may be benefited by the bait cold storage depots; first, the shore fishermen, and second, the bankers. I have found that the former are as a class slow to take up any new idea, usually distrustful of each other, which tends to prevent that hearty co-operation necessary to the success of any joint stock enterprise. I have seen cases of fishermen, not shareholders in a freezer, who would refuse to buy frozen bait, when fish were plentiful and their neighbours were landing good fares, but preferred to waste valuable time endeavouring to find fresh bait when it was very scarce. Time will doubtless educate these to an appreciation of the usefulness of spending one dollar that they may earn five.

The bankers on the other hand are more progressive, and do not as a rule, miss any opportunity of obtaining bait.

I am of the opinion that smaller freezers than we have hitherto been building for the fishing settlements will best supply the shore fishermen, and that if an effort is to be made to supply the bankers, that very large bait freezers, having a capacity of 3,000 or 4,000 barrels, should be erected at important bait points, such as Sambro and Canso.

I think also that some modification of the existing regulations should be considered, looking to the establishment of bait freezers, whereby the management and control could be more concentrated, and at the same time the interests of the fishermen protected. I have also found that statements, heretofore made, respecting the amount of time lost looking for bait, have not been exaggerated in the least, and that the freezers erected have partially filled a want and will continue to be increasingly useful in the future.

I have the honour to be, sir,

Your obedient servant,

J. F. FRASER

## APPENDIX No. 12.

## REPORT ON FISH-CULTURE OPERATIONS IN THE DOMINION OF CANADA, 1901.

REPORT BY PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND  
GENERAL INSPECTOR OF FISHERIES FOR THE DOMINION  
OF CANADA FOR THE YEAR 1901.

OTTAWA, December, 31, 1901.

To the Honourable

JAMES SUTHERLAND,

Minister of Marine and Fisheries,

Ottawa.

SIR,—I have the honour to submit my annual report on the fish breeding operations carried on at the various hatcheries under the department, during the year now ending. As the departmental officer in charge of the system of fish-culture pursued in Canada, I have the satisfaction again of calling attention to the highly successful results accomplished. The statistical tables which follow on a subsequent page show that in five previous years only have these results been exceeded, and there is no reason to doubt that had certain untoward circumstances been avoided or overcome in the two western hatcheries the results this year would have even surpassed those of 1895, the first year in which the Dominion hatcheries were placed in my charge after the retirement of the late Mr. S. Wilmot. In that year, as I have before pointed out, the grand total of over 294,000,000 of fry planted was phenomenal, and under the varying conditions which surround artificial fish-culture, that enormous total can hardly be expected to be equalled, excepting at rare intervals. During the last five years the total results have, however, been specially satisfactory, and that satisfactory state of things has continued undiminished during the year now ending.

Taking the work as a whole, the operations in the thirteen hatcheries reported upon in the following pages has been remarkable, not only for the quantity, but also the quality of the fry. I have received numerous unsolicited testimonies from parties present when fry were being planted, expressing extreme gratification at the healthy and vigorous character of the fry sent out in charge of the department's officers. The remarkably large output of fry is a matter for satisfaction, and is a proof of the efficient manner in which the incubation of the eggs was carried out and the care and intelligence the officers exercised in transshipping and distributing the fry. Judging from the numerous applications which are being received in increasing numbers from individual applicants and from clubs and public corporations in very widely separated parts of the Dominion, it is clear that the work of fish culture is regarded by the public as of the greatest importance and utility. The applications referred to have for their object either the restoration of waters depleted of their former abundance of fish, as for stocking new waters, or for introducing new kinds of fish into waters from which such fish have been hitherto absent although containing various native, and in most cases, valueless species of fish.

The hatching of a new pacific kind of trout, viz., the valued and beautiful rainbow trout at the Bedford hatchery, Nova Scotia, in 1898 and 1899, has proved to be most successful, and the highly satisfactory result of planting these fish in certain waters is adverted to in the report by the officer, who had charge of this experiment. This year I authorized the procuring of a supply of the eggs of that species in British Columbia,



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or failing that, of a supply of Steelhead salmon eggs, but in neither case were the efforts of our officers successful. During the coming year efforts will be renewed in this direction. Supplies of eggs from our own British Columbia waters could not be less successful, and perhaps would be even more so, than the eggs which have been procured from the United States for two years. During the early years of artificial fish-culture in Canada, much of the popular interest in its extension might be reasonably attributed to its novelty, and to the attraction possessed by an enterprise of this nature the unusual character of which rarely fails to possess importance in the public eye. But the period of such popularity has long since passed away, and the work of artificial fish-propagation does not claim attention and regard on the ground of its novelty, or of its untried possibilities. The undoubted benefits which have so largely accrued in the past, and which, in the future, are certain to be still more largely bestowed by a judicious adoption of its methods, are the grounds upon which the favourable opinion of the public is now based. The true place of fish-culture is not as a substitute for the natural propagation of fish in our lakes and rivers, but as a supplementary aid and support. If the natural mode of production be still fostered and guarded, and aided by the work of hatcheries, then the ample waters of our country will be able to yield more abundant supplies of fish, and thus in a very direct way the sporting and vast commercial resources of the Dominion will be amplified. The danger of putting all one's eggs in one basket may be very literally applied to fish-hatcheries when they are advocated as a complete substitute for the normal methods of Nature. To claim that close seasons, and the protection of spawning parent fish could be safely dispensed with were artificial hatching universally adopted is unwise and hazardous. A combination of both is a double guarantee of success and may without question be regarded as the surest means of expanding and increasing the fisheries. Unfavourable conditions may affect the natural spawning beds, and in that case the eggs placed in the incubation trays in the hatchery are preserved from such risk, and the resulting fry may be said to fill the vacancy, which would be seen three or four years later in a scarcity of adult fish, or on the other hand some accident may occur in the hatchery, the water supply may fail, the eggs may become 'fungused,' and in that case the spawn deposited naturally will maintain the usual supply of fish for the future. But when both the hatchery and the spawning beds yield their quota of fry, the total result must be a substantial increase in the supply of fish, and the securing of that greater abundance which is the end and aim of all fish-culture. Representations have been more numerous this year than for many years, urging the extension of fish-culture operations in Canada.

In the maritime provinces no less than five proposals for new hatcheries, not only for salmon, but for lobster breeding, have been strongly pressed. Three sites in Nova Scotia, one in Prince Edward Island, and one in Quebec or the Magdalen Islands, have also been specified; while in Western Ontario at least four locations have been favoured for new whitefish and salmon-trout hatcheries. In Manitoba the erection of supplementary hatching establishments, in addition to the large whitefish hatchery at Selkirk, has been favoured, while in the North-west Territories, where no hatchery has yet been built, four points in widely separated localities have been suggested as good situations for the commencement of fish-culture establishments. Locations near Prince Albert, near Edmonton, near Calgary and near Banff, have been specified. On the Pacific Coast the feeling which has been entertained for many years in favour of additional salmon hatcheries has been very strongly expressed, and four localities have been urged as specially adapted for the purpose, and for securing ample benefits to the British Columbia salmon supply, viz. : Lowe Inlet, Rivers Inlet, northern part of Vancouver Island and Naas river.

In deciding upon a location for a successful and satisfactory fish-hatchery, a number of important points must be kept in view. Not only the necessary local requirements of the establishment, such as an abundant supply of pure water, accessibility and nearness to the best planting grounds or areas to be stocked, but also a commensurate value and importance to the public of the results of such a public institution. A hatchery capable of benefiting only a few people, or a very limited area, would hardly be justifiable under Dominion auspices. The reason being not merely the limited benefits resulting, confined (as it might be on the British Columbia coast) to one canning establish-

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ment or one firm and a few residents, but the fact that in such a case it is easy to secure a sufficiency of breeding fish, and the prosperity of the natural breeding grounds without the expense, trouble and expert knowledge involved in artificial fish-culture. No one who knows anything about the actual facts of the case can doubt that attempts to carry on artificial fish-hatching have frequently been a total failure on account of lack of knowledge on the part of the operators. Unless qualified and experienced men are available it is better to rely upon the natural methods of propagation, and afford adequate protection to a sufficient number of parent fish, both when resorting to the spawning grounds and when actually engaged upon the breeding areas. There is, of course, an immense waste of eggs in natural spawning. Nature is prodigal in such matters, and has provided ample compensation in the production of a super-abundance of eggs and young, when there is no disturbance of the natural balance by man's interference. The vast armies of young fry produced by the most valued species of fishes, which are a familiar spectacle in our rivers, lakes and seas, are the natural safeguard against extermination. A mere fraction of these countless young fish will, as a rule, survive, but such a fraction is of sufficiently imposing dimensions to secure the continuance of the species. It has been a wise policy on the part of the Dominion government to combine fish-culture with efficient protection of the breeding fish on the spawning grounds. The hatcheries have thus been regarded, not as a substitute, but as a supplement to the natural methods of multiplication among the finny tribes.

That the public are alive to the great benefits of a wise and efficient system of scientific fish-breeding is evidenced, as I have already pointed out, in the widespread desire to see new hatching establishments built in localities more or less distant from those at present existing. An increased number of hatcheries implies greater results from the existing hatcheries. Four years ago I gave prominence in my report to the fact that every hatchery was bound to have good and bad seasons. By that is meant, as I explained in the report referred to, that the supply of breeding fish might be ample in some years, while in other years it might be altogether insufficient. There is no certainty in the abundance of parent fish which may be available for supplying eggs to the hatcheries. Even in seasons when female fish may be plentiful, the necessary number of male fish may be lacking, or the reverse may be the case, as indeed often occurs in salmon rivers, that the males are in excess of the female fish. These things are beyond control, but the evils may be overcome by relying upon an increased number of hatcheries, so that what is lacking in one hatchery may be supplied by another. A shortage of parent fish, and a defective supply of eggs, may be remedied by taking a larger number of fish at another hatchery, and securing an excess of eggs which can be transferred to the establishments requiring them. This has been the method so long adopted in the fish-culture operations under my supervision, that on the whole it may be said that the total failure of a hatchery for want of eggs in Canada has been a very rare occurrence. The present year, curiously enough, is an exception. The Fraser river hatchery, owing to a most remarkable shortage of parent salmon, was not in operation. Reliance had been placed by the officers in certain breeding localities which have rarely or never been known to seriously fail; but the lack of fish was so serious that the small quota of eggs, as the officer in charge reports, was such that it did not justify keeping the hatchery open, and in the statistical table the few thousand of eggs secured are not recorded.

The Gaspé hatchery was also not operated as it was intended to have the new building hastened in construction with a view to transferring a supply of eggs from another hatchery. It was not possible to have the new hatchery sufficiently advanced until the fall, when it began operations most successfully. A similar explanation applies to the Cape Breton establishment, and an extra supply of eggs was secured by my instructions to be sent from the Miramichi hatchery when the new Margaree building is ready to receive them. Of the Selkirk hatchery it may be said that while an ample supply of ova was reported by the officer lately in charge, these eggs did not do well during the process of incubation, and so serious was the proportion which failed to yield healthy normal fry, that the number planted was somewhat small in contrast to the very large output of former years.



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This somewhat unsatisfactory record of the three establishments referred to is counterbalanced by the eleven other hatcheries which present a most interesting and successful season's record, six of them showing a most decided increase over the very large and satisfactory output of last year. Newcastle, Tadoussac, Restigouche, Miramichi and Bedford showing a surplus of fry planted amounting to no less than 3,146,000 over the year 1900. The output of fry, including lobsters, at the thirteen hatcheries in full operation, amounts to the enormous total of 203,540,000 which has been only exceeded in five previous seasons. This is 62,456,000 less, however, than last year, which was the highest on record since 1868, when fish-hatching under the department began, excepting the phenomenal year already mentioned on a prior page, when a little over 294,000,000 of fry were planted from the fourteen hatcheries in operation.

In addition to the ordinary system of planting fish in shape of young fry hatched from artificially incubated eggs, the department has aided in the spread of useful species by planting adult or half-grown fish. I referred to an important departure in this direction in my report last year, and the details of the work in connection with the Bay of Quinté black bass pond, may be found in the report of Mr. F. H. Cunningham, the Inspector of Fish Hatcheries. I have in many previous reports emphasized the difficulty of hatching black bass by the ordinary methods adopted in fish-breeding establishments. The use of jars, or of trays, or the adoption of other devices which ingenious fish-culturist have tried, inevitably result in too serious a loss of eggs to justify their continuance. Eggs must be kept scrupulously clean and well aerated, and sickly or dead eggs must be separated and removed. But this is practically impossible with glutinous eggs such as those of the black bass, hence I have advocated breeding ponds and inclosures where the parent fish can make their nests and rear and guard their young. I quote the following very apt remarks from the report of the Fish Culture Superintendent in the State of Wisconsin (1901), as it refers to certain features in black bass culture which deserve attention :—

'The black bass, bullhead and catfish deposit their spawn and, unlike most other kinds, watch over it until it is hatched. When the young school rises, in the case of the black bass, the male fish guards and watches them, driving off all intruders that threaten to destroy his progeny.

'Like all other spring spawning fish the black bass spawns in a rising temperature, and not until the water is above sixty degrees. After the spawning beds have been prepared, if there is a fall in the temperature of the water the bass will leave their beds and have been known in such a case to stay away from their spawning beds for several days or until there was a rise in the temperature of the water again.

'The experience of fish culturists in trying to propagate them by artificial means teaches that the system to pursue in this work is to provide suitable breeding ponds where the bass can be under the constant observation of the person in charge of the work. The fish are permitted to spawn of their own volition and in their own way, though artificial nests have been provided in some instances. The Michigan Fish Commission find that they get better results from providing artificial nests or beds for the use of the bass in spawning. After the bass have spawned and the young are hatched, the parent fish are removed from the breeding ponds; but the young bass are permitted to remain until they are some two inches in length, when the water is drawn from the pond and the fish removed for planting in other waters.

'The black bass are extremely predaceous at all ages, and no amount of food and painstaking care and attention will prevent them from devouring their smaller and weaker associates. They will persist in their cannibalism even under the exciting and unusual conditions attendant upon their transportation from the hatchery to distant waters for stocking purposes. On this account a large loss of young bass must always be expected by the fish culturist, for here the survival of the fittest, only, obtains.'

It is clear therefore that the scheme often urged by parties not possessed of practical and technical knowledge that these fish should be reared until they are half grown would defeat itself. Black bass should be shipped and planted as soon as possible after they begin to independently forage, and when the schools of fry about two inches long begin to disperse. This is the method I propose to carry out at the departmental pond.

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## FISH

STATEMENT showing the Places where and the Years in which the several Fish  
Establishment annually since they

Number.	YEAR.	ONTARIO.			QUEBEC.			
		Newcastle.	Sandwich.	Ottawa.	Magog.	Tadoussac.	Gaspé.	Restigouche.
		Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
1	1868-73...	1,070,000						
2	1874.....	350,000						
3	1875.....	650,000						100,000
4	1876.....	700,000	8,000,000			60,000	110,000	600,000
5	1877.....	1,300,000	8,000,000			150,000	50,000	300,000
6	1878.....	2,605,000	20,000,000			1,180,000	1,051,000	600,000
7	1879.....	2,602,700	12,000,000			707,000	650,000	1,015,000
8	1880.....	1,923,000	13,500,000			1,250,000	1,597,000	1,470,000
9	1881.....	3,300,000	16,000,000			1,155,000	730,000	1,500,000
10	1882.....	4,841,000	44,000,000		200,000	334,000	500,000	740,000
11	1883.....	6,053,000	72,000,000		975,000	660,000	530,000	1,400,000
12	1884.....	8,800,000	37,000,000		250,000	995,000	520,000	300,000
13	1885.....	5,700,000	68,000,000		100,000	985,000	859,000	940,000
14	1886.....	6,451,000	57,000,000		300,000	720,000	290,000	660,000
15	1887.....	5,130,000	56,500,000		1,400,000	1,627,000	576,000	1,380,000
16	1888.....	8,076,000	56,000,000		675,000	900,000	630,000	1,500,000
17	1889.....	5,846,500	21,000,000		3,475,000	850,000	800,000	1,720,000
18	1890.....	7,736,000	52,000,000	5,732,000	2,800,000	1,600,000	450,000	1,280,000
19	1891.....	7,807,500	75,000,000	7,043,000	2,875,000	1,700,000	805,000	2,396,000
20	1892.....	4,823,000	44,500,000	6,208,000	3,050,000	1,300,000	1,000,000	1,750,000
21	1893.....	9,835,000	68,000,000	4,909,000	2,400,000	624,000	965,000	1,240,000
22	1894.....	6,000,000	47,000,000	3,210,000	3,600,000	2,060,000	910,000	883,000
23	1895.....	6,000,000	73,000,000	4,480,000	2,035,000	1,975,000	850,000	1,080,000
24	1896.....	5,200,000	61,000,000	3,950,000	3,350,000	2,060,000	675,000	2,885,000
25	1897.....	4,200,000	72,000,000	4,100,000	3,400,000	2,500,000	300,000	1,250,000
26	1898.....	4,325,000	71,000,000	3,020,000	4,500,000	3,272,000	1,100,000	2,100,000
27	1899.....	4,050,000	73,000,000	3,700,000	3,100,000	2,200,000		1,135,000
28	1900.....	5,175,000	90,000,000	3,450,000	3,098,000	2,125,000		2,025,000
29	1901.....	5,900,000	67,000,000	3,410,000	3,099,000	1,400,000		1,125,000
					3,135,000	2,960,000		1,750,000
	Totals..	136,450,200	1,282,500,000	53,213,000	48,177,000	37,349,000	15,949,000	35,124,000



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## CULTURE

Hatcheries have been erected ; also the number of fry distributed from each were built, including the year 1901.

NEW BRUNSWICK.		NOVA SCOTIA.			P. E. ISLAND.	BRITISH COLUMBIA	MANITOBA	TOTALS.	Number.
Miramichi	St. John River.	Bedford.	Sydney.	Lobster Hatchery, Bay View.	Dunk River.	Fraser River.	Selkirk.		
Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	
60,000								1,070,000	1
150,000								510,000	2
60,000		395,000						1,570,000	3
320,000		1,000,000						9,655,000	4
665,000		1,400,000						13,451,000	5
1,025,000		1,740,000						27,042,000	6
805,000	170,600	730,000			500,000			21,684,700	7
770,000	50,000	680,000			375,000			21,013,000	8
640,000	588,000	850,000	315,000		1,000,000			22,949,000	9
925,000	72,600	800,000	659,000		1,210,000			55,859,000	10
795,000	811,000	1,000,000	853,000		1,000,000			83,784,600	11
900,000	155,000	670,000	772,000		1,100,000	1,800,000		53,143,000	12
945,000	2,181,000	950,000	1,179,000		400,000	2,625,000		81,067,000	13
900,000	2,479,000	4,230,000	1,415,000		500,000	4,414,000		76,724,000	14
1,290,000	4,142,000	4,390,000	1,559,000			5,807,000		79,273,000	15
850,000	3,570,000	3,850,000	2,034,000			4,419,000		88,109,000	16
1,022,000	3,492,000	3,860,000	1,953,000			6,640,000		47,700,000	17
1,503,000	3,165,000	2,550,000	1,000,000	7,000,000		3,603,800		90,213,000	18
1,310,000	2,378,000	2,620,000	690,000	63,500,000		6,000,000		115,772,300	19
975,000	3,299,000	3,180,000		153,600,000		5,764,000		135,959,500	20
1,010,000	4,096,000	3,805,000	288,000	160,000,000		7,800,000	14,500,000	258,314,000	21
1,200,000	4,060,000	3,815,000	195,000	168,200,000		6,390,000	19,000,000	254,919,000	22
1,430,000	4,068,000	4,225,000	243,500	100,000,000		10,393,000	4,500,000	294,040,000	23
1,558,000	4,155,000	5,450,000	496,000	90,000,000		5,928,000		202,459,500	24
1,557,000	3,290,000	3,000,000		85,000,000		5,850,000	9,000,000	198,859,000	25
1,605,000	3,980,000	4,025,000		100,000,000		4,742,000	20,000,000	192,477,000	26
1,620,000	3,957,000	3,970,000		120,000,000		6,200,000	32,000,000	222,350,000	27
1,800,000	3,605,000	3,980,000		110,000,000				265,996,000	28
								203,540,000	29
27,690,000	57,764,200	67,175,000	13,652,500	1,157,300,000	6,145,000	88,375,800	99,000,000	3,119,704,200	



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took an interest in the arrangements, while the Dominion Express Company actively took steps to hasten the project, and the Ottawa agent, Mr. W. A. Clark, spared no pains in seeing that the car was ready and duly forwarded from the bass ponds to Ottawa, where it was attached to the C.P.R. train for British Columbia. The first quota of black bass fry was put off at Crane lake on the third day of the journey. The young bass were active and lively when handed to the care of Mr. D. H. Andrews, Crane Lake, and no doubt in these waters of the North-west Territories, about seventy miles east of Dunmore, they will establish themselves. Calgary was the next point decided upon to hand over a portion of the fry to the agent of Mrs. Westhead, of Buffalo Lake Ranch, near Lacomb, N.W.T. Unfortunately Mr. Willett, the agent, did not receive my wire in time to have all prepared, and the fry could not be left for the Lacombe waters. On Friday, October 5, a third shipment was to be put off at Banff for the waters of the National Rocky Mountains Park. Mr. Howard Douglas, superintendent of the park, had due preparations made, and the bass were safely handed over and successfully planted in the waters approved by this department. As in the case of the quota for waters between Calgary and Edmonton, so in the case of the barrels destined for Windermere Lake, North-east Kootenay, the wire and detailed letter addressed to Mr. Montizambert, who had made every exertion to secure an apportionment of the fry and was prepared to personally see to the reception of the fish, did not arrive in time, and as no arrangements had been made at the stopping place, viz.: Golden, B.C., the fish had to be carried further west. At Revelstoke, on the night of October 4, parties in Cascade City, B.C., had completed arrangements for receiving a quantity of fry for Christina Lake, to be planted in a suitable part of the lake near Robson. For some years Mr. Angus K. Stewart, of Greenwood, had urged this step, and Mr. G. C. Rose, secretary of the board of trade, also favoured the proposal, while Mr. R. E. Thicknesse, of Cascade City, B.C., actively aided in securing the promise of a portion of the black bass shipment. Thanks to these exertions and the capital arrangements made, the fish were successfully planted in Christina Lake. One or two subsidiary deposits of black bass had been contemplated, but could not be carried out, and the fish that still remained were carried to the terminus of Vancouver, taken by steamer across the Straits of Georgia to Victoria, where, in charge of Mr. C. B. Sword, inspector of fisheries, they were placed in a healthy and vigorous condition in suitable lakes near Victoria on Saturday and Sunday, October 5 and 6. This remarkable and somewhat hazardous project was thus carried through to a successful termination, and while involving constant attention, and most exacting and laborious work on the part of the officers in charge of the fish, it establishes beyond doubt the feasibility of transcontinental shipments of this nature. It is necessary to add that the planting of a large quantity of fine healthy fish of a species famed for its game and table qualities, excited the liveliest interest, and was viewed with satisfaction and delight at every point where the various quotas were put off for immediate planting. The waters decided upon were all suitable, and sufficiently isolated to avoid risks of harm. The indiscriminate planting of so strong and voracious a fish as the black bass might have most undesirable and ruinous results. I have in another report dealt with the question of stocking waters with rapacious fish and its attendant dangers, but the details of the foregoing scheme had my most careful and strict attention, so that no fear of danger may be apprehended. That success and widespread satisfaction attended the carrying out of the project is proof of its wisdom and utility. The waters of the west which are suitable will be ere long well stocked, there can be no doubt, with the esteemed and valuable black bass of Eastern Canada.

Considering the very limited appropriation which has hitherto sufficed to carry on fish culture work, it is surprising how much has been accomplished, but the urgent demands for its extension, for the carrying out of new stocking projects, and the adoption of schemes for introducing eastern species into western waters, can only be met by a largely increased expenditure, which will be amply justified by vaster benefits to the public.

I have the honour to be,

Your obedient servant,

EDWARD E. PRINCE,

*Commissioner of Fisheries and General Inspector of Fisheries for Canada.*



## ANNEX A.

OTTAWA, December 31, 1901.

Professor E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit this my first annual report as Inspector of Fish Hatcheries for the Dominion of Canada. During the year I have visited nearly all the hatcheries in the Dominion, and beg to report as follows :—

The system in vogue at the various establishments has been fully explained year after year in the annual reports of the department, so that a repetition seems hardly necessary, but a short description may not be out of place.

The hatchery, situated on the Detroit river, at Sandwich, Ontario, is devoted exclusively to the hatching of whitefish, the parent fish being caught by the department's officers by means of seines, during the month of November, whilst ascending the river to the natural spawning grounds of Lake St. Clair. These fish are confined in crates until ready for spawning, after which they are liberated, and find their way back to Lake Erie.

There appears to be, in some cases, a diversity of opinion as to the advisability of returning these parent fish to the water, it being considered that they should be disposed of; but as the aim of the department in spending large sums of money every year is for the purpose of increasing the supply of fish, and not decreasing it, it would appear that this very aim should be a sufficient reason for the department's policy in connection with the management of this establishment. The year's operations have been very successful, and the work of the government is appreciated.

The past season's work at the salmon-trout hatchery, situated at Newcastle, Ontario, is very gratifying. A larger percentage of eggs were hatched than usual, and the general management of the operations is a credit to the officer in charge.

The parent fish are caught in the department's pound-nets operating at Wiarton, on the Georgian Bay, and after being stripped the fish are returned to the water.

The hatchery at Ottawa, which also receives its quota of eggs from the fish caught at Wiarton, is filling the double role of exhibition and replenishing. The hatchery room is visited by large numbers of interested visitors every year, and affords the public a means of seeing something of the art of fish culture, and gives a general idea of the work performed at the various hatching establishments. This hatchery has been of great value to the waters adjacent to Ottawa. As an instance, I may mention the favourite resort of Charleston lake, which affords a splendid illustration of the department's operations.

We now come to the Salmon hatcheries of the lower provinces. On the Restigouche river, at Flatlands, New Brunswick, is situated the most important and successful salmon hatchery. This is a new building, and has a capacity of 1,700,000 eggs. The parent fish are caught in the department's nets, operated under the supervision of the officer in charge of the hatchery. These fish are nearly all caught during the month of June, and are confined in a retaining pond until ready for spawning, which is about the middle of October, after which they are released. The department's property shows evidence of great care, and the general management is perfectly satisfactory.

At the salmon hatchery situated at South Esk, on the Miramichi river, the operations are conducted in the same manner as at Restigouche. The past season has been very successful. The building is old; but during the year considerable repairs have been effected, so that everything pertaining to this establishment is in better running order than for many years.



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The salmon hatcheries situated at Grand Falls, New Brunswick, and Bedford, Nova Scotia, are supplied with eggs obtained from fish confined in a salt water pond, located at Carleton, opposite the city of St. John. The fish are purchased from *bona fide* fishermen, and confined in this pond until ready for spawning operations in the fall. At this point I think I may say the department has adopted a policy that meets with general satisfaction. The fish are caught by the actual fishermen, and if not purchased by the department, would be placed on the market; but owing to the present policy, they are a means of increasing their species, and by being returned to the water, afford a second source of revenue to the fishermen. Both the hatcheries mentioned above are conducted satisfactorily. The grounds surrounding the Bedford hatchery are kept very neatly by the officer in charge, and being in full view of the railway, very complimentary remarks have been made on the general appearance of this establishment.

A new salmon hatchery has also just been completed on the Margaree river, Inverness county, Nova Scotia. The site is one of the best, as fresh water is in abundance, and the parent fish can be captured right on the spot. A supply of semi hatched eggs will be laid down during the current season. A small house has also been erected on the grounds for the accommodation of the officer in charge.

At Tadoussac the salmon hatchery is doing good work. During the year the road passing the government property has been repaired by the department, which was a much needed improvement to the hatchery. The operations are conducted in the same way as at Miramichi and Restigouche, the fry being distributed in the Saguenay and other adjacent waters.

The department has also a small hatchery at Magog, Quebec, in which salmon-trout and whitefish are hatched, the eggs being supplied by the Newcastle and Sandwich hatcheries. This fall a small quantity of speckled trout eggs have been laid down, and are reported to be doing well. This hatchery has been of great service to lake Memphremagog.

The whitefish hatchery in Manitoba, situated at Selkirk, has not for the past few years been a success. Last season only a small percentage of the eggs were hatched out. The failure is due to several causes, one of which is the system of capturing parent fish by means of gill nets; and again, the water supplying the hatchery is taken from the Red river, which is none of the best; but the principal cause appears to have been the unripe condition of the eggs when laid down. This year a supply of eggs has been sent from the Detroit river, and were laid down in the hatchery in splendid condition, so that it is hoped better results will be reported next year.

The operations at the lobster hatchery, situated at Bay View, Nova Scotia, have again been very successful. During the past summer, the wharf, which has given considerable trouble, has been thoroughly repaired.

A fresh water well has also been supplied, which should obviate, to a large extent, the past difficulty of supplying fresh water for the boiler.

At Gaspé Basin, Quebec, the new combined salmon and lobster hatchery is about completed. This is one of the finest buildings owned by the department for fish cultural purposes, and should be the means of replenishing the lobster fishery on the Gaspé coast.

In British Columbia a large salmon hatchery has just been completed at Granite creek, and reports of the first season's operations are very encouraging.

I cannot close this report without referring to a new departure by the department, viz., the hatching of the small-mouthed black bass. For many years the department has been pressed to take up the hatching of sporting fish, and last year an experiment was tried by which parent bass were confined in a suitable pond and allowed to hatch naturally. This pond, situated on the Bay of Quinté, is about 100 feet square, and will provide spawning surface for about fifty parent fish. The water, which is cold and clear, is led to the pond from never-failing springs. The bottom of the pond descends by ledges, so that the depth of the water will vary from four inches in the shallow parts, to five feet at the deepest point. Last year a quantity of parent bass were placed in the pond and the results were very satisfactory. The establishing of this pond enabled the department to comply with the long standing and annual request of the residents of British Columbia and the North-west Territories for a supply of black bass.

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The necessary authority having been obtained, a car was specially fitted in Ottawa and taken to Belleville, where the young bass, to the number of 3,000, were placed in barrels arranged to receive them. The actual trip commenced on Tuesday, October 1, and ended at Victoria the following Sunday. It is not necessary to enter into the details of this hard and anxious trip. It is sufficient to say that it was successful beyond all expectations. The actual loss did not exceed 100 fish from start to finish.

I would urge very strongly the necessity for an extension of the department's fish-breeding operations. It is true great strides in the way of additional buildings have been made during the past three or four years, but there is still a cry for a large establishment on the great lakes, which is worthy of favourable consideration.

Under the present policy of our hatching operations being confined to certain commercial fish, the hatcheries are idle for some months in the year, and I would suggest that the hatching of sturgeon, pickerel, gray and speckled trout might be favourably considered.

I may say in closing that the department has every reason to be satisfied with the efficient condition of the hatchery buildings and with the fish-breeding operations during the past year. Of course, the expense has been heavier than usual; but good work has been done, and it is expected that results will be far in excess of the expenditure.

Respectfully submitted,

F. H. CUNNINGHAM,  
*Dominion Inspector of Fish Hatcheries.*

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## ANNEX B.

## OFFICERS' REPORTS.

## 1.—GRANITE CREEK HATCHERY, SHUSHWAP LAKE, B. C.

NEW WESTMINSTER, B.C., December 27, 1901.

Professor E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to report in regard to the various hatcheries in British Columbia that since my last report the new hatchery at Granite Creek, Shushwap Lake has been completed and is in operation for the present season. There has also been another hatchery built on the Lac Else River a tributary of the Skeena in Northern British Columbia, which, however, has not yet been completed, but should be ready in time for next season.

This building is 72 feet long and 24 feet wide with 14 feet walls, and has 50 hatching troughs 16 feet long.

Owing to the inaccessibility of the location the cost of this building will considerably exceed the original estimate, and the operating expenses will also be greater than would otherwise be the case.

With regard to the Fraser River Hatchery at Bon Accord, for the season 1900-1901; as I reported to you on November 26, 1900, we were unable to secure sufficient ova to justify the expense of running the hatchery that season, and I have consequently little to report in regard to last season. The few eggs that were secured were placed in a suitable place to develop naturally.

Conditions this season were the very reverse. There has been a phenomenal run of salmon in the Fraser River and we have had no difficulty in securing an ample supply of ova for the hatchery. Owing to a misunderstanding between the workers at the spawning beds and the receiver at the hatchery we had over 10,000,000 ova in the hatching troughs, 4,000,000 more than had proved to be the capacity of the hatchery, but by cutting the troughs in two, and making a drop from the first to the second half we were able to reerate the water and so increase the capacity of the troughs by being able to put the baskets closer together. The eggs of which there are now 9,500,000 in good condition in the troughs are looking well, and, while such a number of fry could not safely be carried in the troughs, even in their improved condition, we have provided ponds outside which will accomodate the surplus we have not room for in the building. I have every reason to hope that we will have an output this year, exceeding by 60 per cent any previous record.

*Granite Creek Hatchery.*

This hatchery was completed in February, 1901, and has since been under the charge of Mr. Roxburgh, formerly in charge of the hatchery at Bon Accord. He has been kept busy getting everything in order for the work, and notwithstanding the difficulties incidental to a new enterprise has been successful in getting in a good supply of ova. There have, however, been many unforeseen drawbacks. The water of the creek which seemed to the eye to be pure, was found, when turned into the troughs to carry with it a great deal of slimy sediment which proved to be a great fungus breeder, and gave great trouble. The eggs unexpectedly proved to be smaller than those of the sockeye taken at Morris Creek, and a good many were lost through passing through the meshes of the baskets. There were also a great many dead eggs in the female fish when



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spawned a number out of all proportion to our experience at Morris Creek. This increased the work of picking enormously, and the staff available were unable for some time to catch up with the work thus entailing further loss.

The total number of eggs placed in the hatchery is estimated by Mr. Roxburgh at 11,000,000, reduced to 8,000,000 after the baskets had been thoroughly cleared of the dead eggs. A large number of these were dead when taken from the fish, the balance being accounted for by the lack of a sufficient number of pickers to get the baskets cleared of the dead eggs before the fungus started.

The first eggs were put into the hatchery on the 27th August, the final consignment being received on the 22nd September.

The first fish hatched on the 23rd October, in 56 days, the balance from 56 to 62 days. This is much sooner than our experience at Bon Accord, probably accounted for by the higher temperature prevalent when the eggs were in the troughs. I regret that from the record of temperatures having been omitted at the beginning of the season I cannot give the exact average.

There have already been 1,500,000 matured fry planted out, and the balance will be ready to put out in five or six weeks.

1,000,000 eggs were shipped to Tasmania on September 17 in care of Mr. Morton an officer of the Tasmanian government who writes me from Hobart Town on November 2, that he had arrived there a week before and found about 50 per cent of the eggs in good condition, which, taking all the circumstances into consideration he considered a very satisfactory result.

528,000 eggs for New Zealand were shipped to San Francisco on October 12, in care of Mr. Robinson, from this office, and he was able to hand them over there to Mr. Lambson, the United States Superintendent in California who was to accompany them to New Zealand, in a very satisfactory condition

*Rivers' Inlet.*

As the various cannerymen at Rivers' Inlet are very anxious to have a hatchery established there, even should it be at their own expense, I sent Mr. Williams who has been acting for several seasons as Fishery Guardian there, to examine, at the close of the season, Oweekeena Lake when the salmon were spawning, with a view to reporting on the best site for the required hatchery. His report on this subject has already been forwarded to you.

During the present year a sum of \$300 has been expended in removing obstacles to the ascent of the salmon in the Courtenay River, Comox, Vancouver Island; a further sum of \$100 being required to complete the work satisfactorily.

The work contemplated on the North Fork of the Quesnelle River in Cariboo, with the same object, has not yet been done as it would cost considerably more than the \$450 authorized.

There are many other places throughout the country where moderate expenditures in this direction would be of great advantage.

I have the honour to remain, sir,  
Your obedient servant,

C. B. SWORD,  
*Inspector of Fisheries.*



## 2.—BEDFORD HATCHERY, NOVA SCOTIA.

BEDFORD, N.S., December 6, 1901.

Prof. E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I beg to submit a report of the operations at the Bedford hatchery for the season of 1901.

Eggs were received from the following named places, and laid down in the troughs :

November, 1900, Carleton, N.B., 600,000 salmon.

March, 1900, Sandwich, Ont., 3,200,000 whitefish.

April, 1900, Restigouche, N.B., 200,000 salmon.

These were hatched and delivered as follows :—

*Whitefish.*

Brazil lake, Yarmouth County, N.S. ....	500,000
Paradise lake, Annapolis County, N.S. ....	500,000
McPherson's Lake, Pictou County, N.S. ....	500,000
Locharbar lake, Antigonish County, N.S. ....	500,000
William's Lake, Halifax County, N.S. ....	200,000
Lake Au L'aw, Inverness County, N.S. ....	1,000,000
Total . . . . .	3,200,000

*Salmon.*

Nine Mile river, Halifax County, N.S. ....	60,000
Pennant river, Halifax County, N.S. ....	60,000
Rawdon river, Halifax County, N.S. ....	50,000
Sackville river, Halifax County, N.S. ....	50,000
Cornwallis river, King's County, N.S. ....	60,000
Gaspereaux river, King's County, N.S. ....	60,000
Annapolis river, Annapolis County, N.S. ....	60,000
Carribou river, Pictou County, N.S. ....	60,000
Murray river, Prince Edward Island . . . . .	50,000
Bell river, Prince Edward Island . . . . .	50,000
Morrell river, Prince Edward Island . . . . .	50,000
Cole Harbour river, Guysboro County, N.S. ....	60,000
Goshen lake, Guysboro County, N.S. ....	60,000
New Horton lake, Albert County, N.B. ....	50,000
Total . . . . .	780,000

About June 20, 1900, some four dozen rainbow trout were caught in one of the lakes near Bedford. The average size and weight of these fish were, length 14 inches, weight 1 lb. 8 oz. each. The fry were planted from this hatchery in June 1899, which proves that the rainbow trout grow rapidly.

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I regret to say that many of the fry planted by the Halifax fishing clubs were lost. About 40,000 were placed in Chocolate lake, which was afterwards drained for the purpose of constructing a dam, and all the fry either went to sea or were allowed to perish on the dry bottom of the lake.

Another lot of 4,000 placed in a public lake, which has a large outlet to the sea, appear to have gone out as none have been seen this season.

Rainbow trout should only be planted in land locked lakes, or streams between lakes having no large outlets, and great care should be taken not to grant applications for fry to be planted in any unsuitable waters.

During the past season large quantities of salmon were seen in Bedford basin; the quantity seems to increase every year. Many small fish of 3 lb. and 4 lb. weight were caught in mackerel nets. I do not know of any salmon nets having been set in the basin this year.

During the heavy freshet of April last considerable damage was done to the mill flume from which the water supply is drawn for this hatchery, and in August last while the water was low in the river I had the flume thoroughly repaired with a good stone floor, (the old one was constructed of wood.) It should now last for many years.

A new supply trough has been put into the hatchery to take the place of the old one, which was so old and tender that it was past repairing.

I am, sir,  
Your obedient servant,

ALFRED OGDEN.

### 3.—ST. JOHN RIVER HATCHERY, NEW BRUNSWICK.

GRAND FALLS, N.B., December 27, 1901.

PROF. EDWARD E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I respectfully beg to submit my annual report on the operations and the work done and performed at the above named hatchery, under my supervision, for the year 1901.

It may not be necessary for me to again refer to the number of fish eggs that were laid down in this hatchery last year, as they were all mentioned in my report for the year 1900, all the ova in the house last year did remarkably well during the winter and hatched out a fair percentage of young fry last spring.

The following distribution of the fry was made during the summer in a very satisfactory manner, with very slight loss of fry, as follows:—

#### *Whitefish Fry.*

Harvey lake, York County.....	320,000
Lake George “.....	320,000
Lake Yoho “.....	320,000
Oromocto lake “.....	320,000
Baldhead lake “.....	320,000
Foster lake “.....	320,000
Long lake, Victoria.....	240,000
Baulieu pond “.....	240,000
Pond at the hatchery, Victoria.....	400,000
	—————2,800,000

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*Salmon Fry.*

St. Croix river, Charlotte County.....	120,000
Skiff lake, Carleton County.....	120,000
Tobique river, Victoria County.....	120,000
Butler lake, King's County.....	40,000
Salmon river, Victoria County.....	80,000
St. John river and Rapide des Femmes Brook...	325,000
	<hr/> 805,000
Grand total.....	<hr/> 3,605,000

Soon after we finished planting the fry, we had the house overhauled and the necessary painting and varnishing done, and some necessary repairs about the hatchery were made, viz. : a new platform and steps at the hatchery door, and a new wastewater aqueduct was put in extending from the penstock to the outside of the building, some eighty feet long, also some other slight repairs were made. It may be necessary next summer to make some little repairs in the hatchery room floor, the interior of the hatching room requires to be whitewashed, the window facings and all the cornishing around the whole building is sadly in need of painting, and I would respectfully request you to have it ordered to be done during next summer.

On the 28th October last, we went to Carleton, St. John west, to strip the salmon that were in the pond, there was a large quantity in the retaining pond but they were scarcely sufficiently ripe when we arrived, Mr. Alexander Mowat was on hand as usual and rendered good assistance in stripping the fish; in fact Mr. Mowat and myself did the principal part of the work. I have no record of the number of salmon that were manipulated nor the quantity of the eggs obtained, as Mr. O'Brien seemed to take charge of all that.

I got about 1,400,000 eggs for my share, they are looking quite healthy at present, there is considerable bad amongst them, but we are getting them pretty well cleaned out; I am anticipating a good percentage of young fry next summer. Salmon have been quite plentiful in the St. John river the past season, and it is generally conceded that the artificial hatching of salmon is the principal and only means of keeping up the supply in our rivers, notwithstanding the excessive fishing, both legal and poaching. The Superintendent of the Tobique River Salmon Club kindly furnished me with a report from their preserve; he states that the low water in the river prevented in a great measure the salmon from ascending the stream to their spawning grounds; he says the young smolts are very plentiful in the Tobique waters. The number caught by the members of the club was 193 salmon and 16 grilse, sixteen of the salmon weighed 20 pounds each and over. The members passed a new by-law prohibiting any member catching any more than a certain number of salmon in each and every year on the spawning grounds thereby offering a greater facility for propagation.

It is regrettable that the salmon in the main St. John river could not be better protected. I am informed that the poachers slaughter them continually.

All of the foregoing respectfully submitted.

I am, sir, your obedient servant,

CHARLES McCLUSKEY,  
*Officer in Charge.*

## 4.—MIRAMICHI HATCHERY, NEW BRUNSWICK.

SOUTH ESK, N.B., December 30, 1901.

PROF. EDWARD E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to present the annual report upon the operations at this hatchery during the year 1901.

The results have been highly satisfactory, as a large number of fry were distributed in the Miramichi waters, and the supply of ova now in the hatching troughs considerably exceeds any number previously placed in this hatchery.

Referring to my last annual report, it will be seen that the number of ova in the hatchery in the autumn of 1900 was 1,620,000. In addition to that number, 250,000 were received from the Restigouche hatchery during the month of March, making a total of 1,870,000. The approximate loss during the period of hatching was 70,000, leaving a balance of 1,800,000 fry for distribution. This number was successfully planted in the following streams:—

North-west Miramichi river and tributaries, Restigouche fry .....	230,000
North-west Miramichi river and tributaries, Miramichi fry .....	400,000
Main south-west Miramichi river, Miramichi fry .....	200,000
Little south-west Miramichi river " .....	500,000
Sevogle river, Miramichi fry .....	260,000
Renous river " .....	125,000
Stewart's brook " .....	20,000
Salmon river and Trout brook, King's Co., N.B. ....	50,000
Warren's Pond, Kensington, P.E.I. ....	15,000
Total .....	<u>1,800,000</u>

The fry were distributed without any loss, and on every stream the most suitable localities were selected. The application of Mr. A. H. Love, of Kensington, P.E.I., was not filled, as the applicant failed to meet the fry at Summerside, or leave instructions regarding them, therefore, they were planted in Warren's Pond, where a small lot were also planted the year previous. The fishermen and anglers were much pleased with the manner in which this large number of fry were distributed, and the hatchery was visited by quite a large number of these gentlemen during the time of distribution.

*Repairs.*

After the work of planting the fry was completed, the repairing of the hatchery and putting in a new supply pipe was commenced. Upon examination it was found that the greater part of the foundation and floor of the building were completely decayed. All the old underwork was, therefore, removed and replaced with new sills, joists and flooring. The walls of the building were also decayed, and it was found necessary to replace the posts and studding, as well as the posts that support the upper flat. The plaster which had become loosened by the dampness, was entirely removed,



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and the walls covered with matched boards instead, which greatly improves the appearance of the hatching room, and also makes the building much warmer. As it was necessary to remove all the hatching troughs when repairing the floors and underwork, it was found that very few of them were fit for any further service, as they were badly decayed and worn out—therefore, a complete new outfit of troughs, waste tanks and pipes was put in. The supply tank was also repaired and strengthened, and the arrangement for conducting the water from the building was much improved. The whole interior, including walls, tanks, troughs and posts, was painted, and the inside of the troughs and the other fittings thoroughly varnished. On the whole, the hatching rooms and appliances are greatly improved in appearance and every other way.

After completing the interior of the hatchery, the old wooden pipes that conducted the water from the supply dam, were taken up and replaced with an eight inch terra cotta pipe. Formerly four three inch wooden pipes gave the supply, and as they were continually leaking, were a great source of trouble and expense. The work of putting down the new pipe was very difficult owing to the nature of the earth through which it is laid. The drain was continually filling with quick sand and water, which caused the work to proceed much more slowly than if ordinary conditions were met with. However, this new pipe is a great improvement on the old system and there is now a much larger supply of water than was given by the arrangement formerly used.

Besides the repairs and improvements to the hatchery and the laying of the new supply pipe, considerable other work was performed on the outside appliances. The bottom of the supply pond was dredged, the dam strengthened and the embankments built up with earth and gravel about two and a half feet higher to prevent the water flowing over during the spring freshets. Considerable repairs were also put upon the retaining pond and dam. Several new pontoons for carrying parent fish were built, and also a scow about thirty feet long, for towing purposes. Altogether the hatchery and appliances were thoroughly overhauled and repaired, and everything put in as good running order as possible. Next year it will be necessary to expend a small amount on the outside of the building and surroundings. The front of the house will require painting and the fences about the place will have to be replaced with new ones.

*Procuring Parent Salmon.*

Operations for procuring the parent fish were commenced on September 16, and on the 18th the first fish were netted. Fishing was continued from that date until October 14. The actual time the nets were in operation was only twenty-one days, and during that time 516 salmon were taken. This is the largest catch of fish ever made for this hatchery in the same length of time. Of this number eighty-three females and forty-four males were taken in the set net on the Little South-west Miramichi, and 241 females and 148 males were obtained by seining in the pools on the North-west Miramichi. This made the total number placed in the retaining pond amount to 324 females and 192 males.

*Collection of Ova.*

On October 24, the work of stripping the parent fish commenced. Previous to that date sixteen of the females were liberated, leaving a balance of 308. The collection of ova continued until October 30, when it was found that the fish still remaining in the pond were nearly all unripe. These were allowed to remain until November 4. In the meantime the assistant officer proceeded to Carleton pond, at St. John, to assist the other officers there, returning on November 3 with a shipment of 402,000 ova, for this hatchery. The manipulation of the fish remaining in the pond here, was then continued and completed on November 8, the total number of ova collected from the 308 fish being 1,951,000. After these were all placed in the hatchery and the seasons operations closed, instructions were received to take charge of a shipment of ova that was intended for the new hatchery at Margaree, C.B., but as that hatchery was not yet in readiness for their reception, they were transferred here, and placed in the hatching troughs by

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the assistant officer. This makes a total number of 2,908,000 ova, now in the hatchery. This is the largest number of ova ever carried here, but I feel confident that they can be safely cared for until the proper time for removal to Margaree arrives. Then fully a million can be transferred from here to the new hatchery.

In conclusion, I may say that the operations during the past year have been very successful, and a large output of fry may be looked forward to next year.

I am, sir,  
Your obedient servant,

ISAAC SHEASGREEN.

### 5—RESTIGOUCHE HATCHERY.

FLATLANDS, N.B., December 22, 1901.

Professor E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I beg to submit the following report in connection with the operations at the Restigouche Hatchery, during the past year, 1901.

I am much pleased to be able to state that great success has attended every branch of the work.

Some one million two hundred and ten thousand healthy, beautiful fry were distributed in the Restigouche river and its tributaries, by the usual method of the floating crates. In addition to these, five hundred and fifty thousand semi-hatched eggs and fry, were transferred to the Nepisiguit river, and Miramichi and Bedford hatcheries, making a grand total of one million seven hundred and fifty thousand fry and live eggs, nursed and sent out from this hatchery during the past season.

The time of distributing the fry from the new hatchery, is fully ten days later than was the case at the old Dee Side. This is caused by the cold spring supply brook taking its course almost entirely through forest, the snow is later in melting, consequently, advantageous to the planting of the fry, as the freshets, &c., are over.

The season was most favourable for the setting of the government nets and capture of parent fish. One net took salmon as early as May 24, and the other on June 1. The retaining pond was at once made ready for the reception of the fish, and by July 10, both nets had taken three hundred and seventy-five very large salmon. As these were considered ample for the stocking of the hatchery, the nets were taken out a month before the season closed, and the men discharged. Another hundred salmon could have been easily taken, if required, as the licensed netters lower down took a great many fish after the government nets were taken up.

The gathering of the fish together took place on October 18, when the males were selected and separated from the females, and the work of collecting the eggs began on October 20, and continued until November 10. Three hundred and seventy fish were manipulated—two hundred and thirty females and one hundred and forty males—yielding two million three hundred and ten thousand eggs. These were packed in the hatchery trays and conveyed to the nursery by scow, and are in grand condition. The parent fish were again liberated and looked well.

On October 28, in obedience to your instructions, I proceeded to St. John to assist in collecting the eggs at the Carleton pond. We handled upwards of 1,200 salmon, two-thirds females, yielding nearly 5,000,000 of beautiful eggs. After all the other hatcheries were given a full supply, a surplus of 700,000 still remained and were ordered to Restigouche, which I brought with me. These eggs are in perfect condition, and give the Restigouche hatchery a grand total of 3,010,000 at the present time.

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The parent fish at the Carleton pond were in fine condition, and I can only repeat my former statement, viz., that there are no finer salmon than the St. John river salmon, and no better place in the world for impounding parent salmon than the Carleton pond. The facilities for getting the fish are all which can be desired. Fancy being able to purchase 1,200 salmon from a few weirs in the harbour, half a mile distant from the pond. Who can estimate the value or results of such a scheme? Here are 1,200 salmon yielding 5,000,000 of eggs, out of which eighty per cent of living fish are turned into the various rivers, throughout a large portion of the eastern part of the Dominion.

The capture of ample supplies of parent fish is the most difficult and essential question with which we have to deal, and the success or failure of any given hatchery, must necessarily depend and be governed by the supplies of stock fish secured for it. It is not always convenient or possible to purchase supplies of stock fish, hence the great value of the Carleton pond.

We have in times past experienced some difficulty, in obtaining supplies of fish at the Restigouche hatchery. But by the purchase of certain licensed nets and the careful handling of the fish by our own employees, all difficulties have been overcome, and a fair supply always obtained. Yet there is fault found and certain amount of complaint among the anglers. The hatchery nets are the highest on the river, and they say if these fish were allowed to ascend the river, they would get them, or take a much larger number with the fly. This may seem a plausible argument from the angler's point of view, but the netters would be justified in using a similar argument, that they should not be under any restrictions but set nets indiscriminately.

*Completing the new Hatchery.*

A large amount of work was done during the season. The dwelling part of the building outside was papered, clapboarded and painted. The vacant space in the hatchery which has not been required until this year, was filled with troughs so that now there is a hatching capacity of three millions of eggs. All trays, troughs and plant were varnished, and outsheds and fence painted. The hatchery and all its appliances never were in a better condition to do excellent service for the rivers. Very little new plant will be required for another year. A few new distributing cans may be needed. I would again urge the importance of establishing a retaining pond at the hatchery, in order to retain and grow some of the fry until a few years old. This could be easily done at a small cost by using the surplus water.

Regarding my inspection of the Margaree hatchery in Cape Breton, last July, I consider the site very acceptable. The hatchery is well situated, taking its supply of water from the river. The facilities for distributing the fry are good and no difficulty can be experienced in getting stock fish, as a salt water retaining pond can be made at the mouth of the river, where supplies of parent fish can be purchased from the netters. Great results must necessarily follow from a hatchery so situated.

*General Remarks.*

Complaint is made by the anglers, that the fish are falling off. This is no new thing, and just so sure as the season is not favourable for fly fishing, all kinds of complaints are made. The past season was very early, and the anglers really had July fishing in June. There were no rains and the temperature of the river rose very high early in June, and salmon could be taken with a fly only in the large aerated pools. The reaches of the river which usually gives big scores, in the early season under ordinary circumstances, would not respond this year. But this does not prove that the fish were scarce, and all the information from guardians, scowmen and hunters, and from my own experience and knowledge, show that the opposite is the case, and that the fish are rather increasing. There have certainly been two good years in succession.



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I was in Metapedia, June 15, 1900, and four or five rods brought in thirty-one salmon, average weight 22 pounds for that day's fishing. About the same date and fifty miles higher up the river, at mouth of the Kedgewick, the lessee of a small piece of water was fast to twenty one salmon in six days, and the fishing all over the river was much the same. I may also mention a few of the scores which came under my notice for the past season. I heard of one club member taking seventy salmon, and he was not above Metapedia. A few of these may have been taken in the Cascapedia. The Sage party took about 130 salmon. The lessees of the Upsalquitch river captured 160 salmon. The Roger, Brooks and Vanderbilt party at Kedgewick landed over 200 salmon. Barrels of salted salmon came from there. Others made fine scores, and all information proves that the rivers were well filled with fish.

I heard of some of the netters down the bay making big hauls, and I think some of the dealers of the locality could supply authentic information as to the catches among the netters.

Regarding the future supplies of parent fish, if, in the opinion of your department, you think it desirable to yield to the wishes of some of the anglers, to have the present trap nets removed, I would suggest that a salt water pond be established below Dalhousie, and the stock fish obtained in some way, perhaps from the netters. This would not be impossible, and could be worked in the same manner as the Carleton pond, St. John.

I am, sir, your obedient servant,

ALEXANDER MOWAT.

## 6.—TADOUSSAC HATCHERY, QUEBEC.

TADOUSSAC, December 12, 1901.

Professor E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—In accordance with the usual departmental rule, I have the honour to submit my annual report upon the operations carried on in the Tadoussac hatchery during the past year. The number of salmon eggs placed on our trays last fall was 3,350,000. From that crop of eggs 200,000 were packed in moss during the spawning time and sent to the Roberval hatchery to be hatched there and distributed in the large rivers of the county of Lake St. John, by H. J. Beemer, Esq., proprietor of the Roberval hatchery. The salmon eggs in our Tadoussac hatchery kept well all winter, leaving 2,960,000 salmon fry for the distribution in June last, and made as follows :—

St. Marguerite river . . . . .	400,000
Baude river . . . . .	500,000
Mowat's lakes . . . . .	600,000
Chisholm brook . . . . .	500,000
Fraisière brook . . . . .	400,000
A Mars river . . . . .	200,000
St. John river . . . . .	200,000
Murray river . . . . .	100,000
Jacques Cartier river . . . . .	50,000
Kenogami lake . . . . .	10,000
	<hr/>
	2,960,000



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The distribution of salmon fry in the rivers tributaries of the Upper Saguenay River has been made with the assistance of the tug boat *Forrest*. Our salmon eggs hatched out this season at least fifteen days earlier than usual on account of an unusual early spring. As soon as the distribution was over the hatchery has been washed all over and all the trays varnished during the summer. Our hatchery is in good working order and the outside of the building presents a good appearance, having been painted all over during the summer. The main road in front of the hatchery ground has been repaired, to the delight of the Tadoussac residents and the numerous visitors during the summer season.

Our salmon nets were set up in May for the capture of the parent salmon for breeding purposes. Five hundred and ten parent salmon were kept in the pond until ready to spawn at the end of October and beginning of November. From that number the 300 female salmon gave us a crop of 3,150,000 eggs now deposited on the trays and looking quite well. The breeding room heated by two coal stoves keep a good regular temperature day and night.

The salmon fishing has been abundant this season, one net fisherman, Mr. R. Boulianne of Pilot's Cove, taking in one tide 112 fine salmon, averaging 23 pounds each. All the net fishermen are quite satisfied of their regular good catches of salmon, and making great praise of the Tadoussac hatchery for so fine an increase of salmon. The department has given good reasons for not doing the work of finishing the dam of the salmon pond this year, but I hope something will be done for it next spring; our pond is filling up with all kinds of dirt and getting very shallow. For that reason we have lost at the first ice on the pond, twenty salmon caught under the ice at low tide. Every year after the spawning time is over and the wire net taken up, the parent salmon are at liberty to go out, but it takes many days before they all go out. At every tide a good many go out with the rising tide and come back to the pond with the falling tide. It is some of these, remaining in pond by a very cold night when ice formed all over, that have been caught that way in the shallow places of the pond. It is the first time that this thing has happened, the cold weather having set in so early this fall, but it must not be repeated, for we must do something to prevent it, and the first thing to do is the closing of the dam to keep more water in the pond at low tide. Your department is aware of the need of twenty-five more large cans for the distribution of the salmon fry. After many experiences made and explained to the officers of the department, I want those large cans made of heavy tin, nothing else; the galvanized ones have proved poisonous to the salmon fry carried at long distances. It is possible that some water have more effect to dissolve the poisonous matter entering in the process of galvanism. At all events the water of our artificial lake has that effect, and the transport of salmon fry at long distances must be avoided, by galvanized cans. I only used the twenty-five I had on hand for short distances and I have never had any trouble with my tin cans. To show you the difference of cans, I have repeated many times this experience. I put fifty salmon fry in each can, a galvanized and a tin one without changing water, after sixteen hours the fry in the galvanized can are all dead and I have kept for two days the ones in the tin can and returned them to water in a healthy state. To cover the whole breeding room with the same trays received two years ago I want 250 more, the old wire ones are very unhandy for the reason that they have to be weighted with stone to keep them from floating it is always a great trouble in the washing of the eggs. As the applications for salmon fry are getting more numerous every year, I would advise your department to consider the applications only for the salmon rivers; as we have no time to spare in the five weeks of our large distribution. It is impossible to keep the salmon fry after June, and very often the water of our shallow lake gets too warm by the end of June. The planting of the salmon fry in the Mowat Lakes having proved so efficient for the growing of the young salmon, it is my intention, for next spring, to plant some fry in two beautiful lakes of the purest water, having a fine discharge to the St. Lawrence by the Little Bergeronnes River. In those lakes is found a small fish known as fresh water smelts. This small fish, in large quantity will be a fine food for the young salmon.

I have the honour to be, sir, Your obedient servant,

L. N. CATELLIER.

7.—MAGOG HATCHERY, QUEBEC.

MAGOG, December 11, 1901.

Prof. E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I beg to submit herewith a report of the operations at this hatchery during the year 1901. On March 5, I received at Magog Railway Station, from Mr. Wm. Parker, 3,000,000 whitefish eggs, from Sandwich, Ontario, they arrived in very good condition and continued to do well during the period of incubation, the hatchery was in satisfactory working order excepting the floor, which is badly decayed, and there was a plentiful supply of the best of beautiful clear water.

On May 18, I received instructions from the department to proceed to Newcastle, Ontario, and bring from that place, a shipment of salmon-trout fry to the Magog hatchery, to be distributed in this district. I started on the 20th for Newcastle, and arrived there on the 21st, returning to Magog on the 23rd with about 150,000 fry, and I am pleased to be able to say in excellent condition, the percentage of loss was so small as not to be worth mentioning. I had them for several days in the tanks in the hatchery before the first lot was planted. I might say here that the officers at Newcastle did everything in their power to facilitate my work, as well as the officials of the Grand Trunk Railway, besides the weather at the time was cool, and experience had showed me this condition of weather to be quite a consideration when one had to travel six or seven hundred miles by rail with a large shipment of tender fry, if the weather had been hot and sultry the result might have been very different in spite of the greatest care.

Last year by instructions from the department to secure if possible forty or fifty thousand eggs of speckled trout, I proceeded to Sugarloaf Pond, and in ten days secured forty-five thousand eggs- I could easily have got fifty thousand if the pond had not frozen over ; the above number of eggs was laid down in the troughs in the hatchery in the best of condition and did extra well, hatching out in the end of April. The distribution of fry from the hatchery commenced on May 2 and continued until June 10, and was planted in good condition in the following waters :

*Salmon-trout.*

Lake Memphremagog, County Brome and Stanstead....	35,000
Lake Fortin, County of Beauce.....	25,000
Lake Massawippi, County Stanstead.....	15,000
Trouser Pond, County of Brome.....	10,000
Oxford Pond, County Brome and Sherbrooke.....	10,000
Huntingdon river, County Huntingdon.....	25,000
Finwick Lake, County of Richmond.....	15,000
Pirkins Pond, County of Richmond.....	15,000
Total ... ..	150,000

*White fish.*

Pirkins Pond, County Richmond. ....	50,000
Lake Fortin, County Beauce.....	50,000
Finwick Lakes, County Richmond.....	50,000
Brome Lakes, County Brome.....	200,000

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Oxford Lakes, Counties Brome and Sherbrooke.....	450,000
Key Pond, County Sherbrooke.....	300,000
Massawippi Lake, County Stanstead.....	475,000
Lake Megantic, County Megantic.....	250,000
Lake Memphremagog, Counties Brome and Stanstead...	1,125,000
Total.....	2,950,000

*Speckled Trout.*

East Halty Trout Pond, County Standstead.....	5,000
Rock Pond, County Sherbrooke.....	10,000
Castle Brooke, County Brome and Standstead.....	7,500
Sugar Loaf Pond, County Brome.....	7,500
Patterson Lake, County Three-Rivers.....	5,000
Total.....	35,000

*Recapitulation.*

Salmon Trout.....	150,000
White fish.....	2,950,000
Speckled Trout.....	35,000
Total.....	3,485,000

On October 23, I received instruction from the department to proceed to St. John, N.B., and secure at Carlton Salmon Pond a shipment of salmon eggs for Magog hatchery. I left Magog on October 28 for St. John, returning to Magog with 376,000 eggs, which I placed in the troughs in good condition and which are doing well, with every prospect of a good yield next spring.

*Repairs.*

As has been already mentioned the floor of the hatchery is in a very bad condition, and some of the floor tanks are almost rotted down with dry rot, this should be repaired before another year's work is on.

I am, sir, your obedient servant,

ALEX. FINLAYSON,  
*Officer in charge.*

## 8.—NEWCASTLE HATCHERY, ONTARIO.

NEWCASTLE, December 13, 1901.

PROF. E. E. PRINCE,  
Dominion Commissioner of Fisheries.

SIR,—I have the honour to submit a report of the fish cultural operations carried on at this hatchery during the past year.

The following schedule will show you the points of distribution, also the number and kinds of fry distributed and placed in each locality last spring.



*Whitefish.*

Lake Ontario, Hamilton .....	200,000
“ Toronto .....	300,000
“ Cobourg .....	200,000
“ Consecon .....	250,000
Georgian Bay, Collingwood .....	300,000
“ Meaford .....	300,000
Bay of Quinté, Belleville .....	300,000
“ Picton .....	300,000
Lake on the Mountain, Picton .....	200,000
Lake Couchiching, Orillia .....	300,000
Lake Simcoe, Barrie .....	300,000
Lake Huron, Southampton .....	300,000
	<hr/>
	3,250,000

*Salmon-trout.*

Lake Ontario, Toronto .....	100,000
“ Hamilton .....	50,000
“ Cobourg .....	50,000
“ Consecon .....	50,000
“ Kingston .....	50,000
Bay of Quinté, Belleville .....	50,000
“ Picton .....	50,000
Georgian Bay, Collingwood .....	100,000
“ Meaford .....	50,000
“ Wiarton .....	100,000
Lake Couchiching, Orillia .....	50,000
Lake Simcoe, Barrie .....	50,000
Lake on the Mountain, Picton .....	100,000
Charleston Lake .....	100,000
Clear Lake .....	100,000
Eagle Lake .....	100,000
Hybla Lake .....	50,000
Five Lakes, Haliburton Co. ....	100,000
Five Lakes, Bay Quinté Ry. ....	100,000
Lake Huron, Goderich .....	100,000
Lakes Quebec, per Mr. Finlayson .....	100,000
	<hr/>
Total distribution of salmon-trout. ....	1,650,000
Total distribution of whitefish. ....	3,250,000
	<hr/>
Total distribution, Newcastle. ....	4,900,000

I beg to inform you that the fry were all in first class condition, and without a single exception were deposited in the different waters in the foregoing schedule with more than usual success.

The Newcastle hatchery is in first class order, and I have endeavoured to keep it in good shape without any very material expense to the department, as we have done a great deal of the repairing that was required ourselves. We have laid a new iron pipe part of the distance from the dam to the hatchery and done the excavating ourselves. We have painted the troughs and the floor of the hatchery, and varnished all of our trays and boxes for shipping eggs, &c. We have also invented a deeper tray for hatching and a tray which is perforated more than the old style of tray, and we find, after a thorough test, that it has returned us excellent results. We need about 300 more to carry on the hatching properly, and I am now negotiating to have them manufactured as cheaply as possible.



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According to your instructions, I proceeded to Wiarton, Georgian Bay, October 1, with our assistants, to procure our usual supply of salmon-trout ova for this and other hatcheries. We succeeded in getting our nets set about October 22, and raised the nets on the 26th and secured about 50,000 eggs.

After that date we had some very trying weather to encounter all through the balance of the season, which to a great extent retarded our operations. We have laid in port for four and five days at a time, it being impossible and dangerous to handle the nets, the sea running so high. But I am happy to say after due patience we succeeded in securing about 4,000,000, out of which I delivered to the Ottawa hatchery about 1,250,000, which leaves a balance in this hatchery of 2,750,000, in good condition and doing well.

Our plant is in good condition in Wiarton, except one new net which we require for the next season.

We were forced, through the very cold weather, to tie our pile driver and spawning boat to the pier at Wiarton, but I have made arrangements to have them pulled out if the ice goes out before spring, if not I will be forced to leave them there until the spring.

I have the honour to be, sir,

Your obedient servant,

WM. ARMSTRONG,

*Officer in charge.*

## 9.—OTTAWA HATCHERY, ONTARIO.

OTTAWA, December 10, 1901.

Professor E. E. PRINCE,

Commissioner of Fisheries, &c., &c.

SIR,—I beg to submit my annual report of the operations carried on in the Ottawa fish hatchery during the year.

On November 9, 1900, were received from Mr. W. Armstrong, of the Newcastle hatchery, about 1,250,000 salmon-trout eggs which had been collected at Wiarton, Ont. Also in the month of February, 1901, I received from Mr. W. Parker, of the Sandwich hatchery, about 3,000,000 whitefish eggs. The eggs were in good condition when received. The fry hatched out in the months of April and May. The work of distributing the fry was done by Mr. Andrew Halkett and Mr. A. M. Ross, of the Fisheries Department.

I am pleased to say that the work was done in a very satisfactory and successful manner.

The fry having been deposited in the following named waters:—

*Distribution of Salmon Trout.*

To Victoria Lake .....	60,000
Masson " .....	40,000
Rock " .....	100,000
Lac des Sables.....	50,000
Perth.....	30,000
Three Rivers Lake.....	60,000
Black " .....	60,000
WhiteFish " .....	60,000
Daly's " .....	100,000

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Raymond Lake, No. 16 & 17.....	50,000
Barnet ".....	30,000
Labelle ".....	50,000
St. Francis ".....	50,000
Fortune ".....	50,000
St. Rock Lake (L'Islet).....	50,000
Lake No. 7 (Joliette).....	50,000
St. Gabriel.....	30,000
Lakes in Prince Edward Island.....	120,000
Riviere du Loup.....	20,000
Total.....	1,060,000

*Whitefish.*

To Eagle Lake.....	520,000
Clear ".....	500,000
Maskinongé Lake.....	250,000
Long ".....	500,000
Lac Tremblant.....	180,000
Coursolle Lake.....	120,000
Ste. Agathe ".....	280,000
Total.....	2,350,000

The hatchery is in good repair and condition for the work this year.

I remain, sir,  
Your humble servant,

JOHN WALKER,  
*In charge of Ottawa Hatchery.*

10.—SANDWICH HATCHERY.

SANDWICH, December 19, 1901.

To Prof. E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—In accordance with the rules of the department and in compliance with your instructions I take pleasure in submitting my annual report of the work connected with the fish hatchery here under my supervision.

According to last year's report this hatchery contained 100,000,000 whitefish eggs from which were turned out 82,000,000 young fry and semi-hatched eggs, which were disposed of as follows :—

*Eyed Eggs.*

Newcastle, Ont.....	3,500,000
Ottawa, Ont.....	3,000,000
Magog, Que.....	3,000,000
Bedford, N.S.....	3,000,000
St. John, N.B.....	3,000,000
Total.....	15,500,000

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*Young Fry.*

Point Edward, Lake Huron .....	4,000,000
Belle Isle, Detroit river....	3,000,000
Fighting Island, Detroit river .....	4,000,000
In bay below Fighting Island .....	4,000,000
Stony Island, Detroit river.....	3,000,000
Bois Blanc Island, Detroit river.....	6,000,000
In lake below Bois Blanc Island .....	6,000,000
Pigeon Bay, Lake Erie .....	5,000,000
Bar Point, Lake Erie.....	3,000,000
Colchester " .....	2,000,000
Kingsville " .....	1,000,000
Leamington " .....	1,000,000
Rondeau " .....	1,000,000
Port Stanley " .....	1,000,000
Hamilton, Lake Ontario.....	1,000,000
Niagara " .....	1,000,000
Toronto " .....	1,000,000
In river at hatchery.....	20,000,000
Grand total.....	82,500,000

The various consignments of eggs enumerated above were placed in the water at the points designated, in excellent condition.

This fall we have secured and laid in the hatchery 100,000,000 whitefish eggs which are in good condition.

In accordance with the wishes of the department, I have, also, in addition to the 100,000,000 above named, secured and placed 30,000,000 whitefish eggs in hatchery at Selkirk, Man.

The total catch of fish this autumn is accounted for as follows :—

Liberated .....	12,670
Sold .....	1,500
Salted .....	100
Lost.....	125
Used.....	75
Hotel Dieu (Hospital) .....	40
Total .....	14,510

*The catch of Fish.*

According to reports from most reliable sources in numerous quarters, the catch of white fish in the Detroit river and neighbouring lakes has been unusually good, and from present indications will continue to improve and thereby become a source of profit and pleasure to those of our citizens who are engaged in the fishing industry of this Dominion.

*Repairs.*

In reference to necessary repairs I wish to report that the following repairs are required: A new foundation under the boilers and pumps, and also repairs be made to our troughs and tanks. I find that the two old rotary pumps are worn out, and under present conditions seriously impede the successful carrying on of the important work of the hatchery, I would, therefore, recommend that a new pump be purchased.

I remain, respectfully, Your obedient servant,

WM. PARKER, *Officer in charge.*

## 11.—SELKIRK HATCHERY, MANITOBA

SELKIRK, November 30, 1901.

To Prof. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit to you my first report on the work of the institution, which has been under my charge since my appointment as Inspector of Fisheries for this province. The period to which I refer, is very short, and I am not able, therefore, to present a full and detailed account of the operations, which were largely carried on by my predecessor in office.

As was pointed out in last year's report upon this hatchery, the season has very much to do with the success of the hatching of whitefish, and no doubt the best efforts of those engaged in the work of obtaining spawn, or of hatching it in the tanks of the fish-breeding establishments, may be baffled by unfavourable circumstances. Such circumstances, dependent on the season, effect not merely the abundance of ova, but affect directly the quality of the eggs. The arrangements, which you sanctioned, for obtaining whitefish eggs on Lake Winnipeg, resulted in a large supply being secured, for the number reported by the officer then in charge, showed a slight increase of the total of the previous year, as given in his report for that year (1900); but it appears, that, owing to the immature nature of the eggs, and the fact that a large proportion seemed to be not properly fertilized, the loss during the months of incubation was serious and continuous. A peculiar tenacious matter collected upon the jars, which was said by some parties to be due to the bad quality of the water supplied to the hatching jars. Whatever may have been the cause at work the eggs did not do well, and the resulting fry were so disproportionately small in quantity, that the results would hardly justify record in statistical tables for the year. The season's work cannot be said in any sense to have resulted in success.

The amount of fry ready to be planted at the end of the incubation period has been variously estimated and the actual figures are not available. I am not able, in view of this uncertainty, to furnish numerically an estimate of the quantity. All that can be said is that a very small percentage of the eggs yielded fry and it is clear that some improved method of supplying healthy mature eggs, properly imprgnated, must be adopted, if this splendid hatchery is to adequately benefit the fisheries of this province.

The plan which for the season of 1901 you have sanctioned will for the present remove all difficulties. The eggs from the waters of Ontario now placed in the hatching trays here will yield fry, which there is every reason to believe will do well in the lakes of Manitoba. I understand that the introduction of young whitefish into new waters has generally had the most satisfactory results, and Ontario whitefish planted in millions in our lakes will still further benefit our fisheries and tend to improve the already excellent quality of Manitoba whitefish.

I am, your obedient servant,

W. S. YOUNG.



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## 12.—BAY VIEW LOBSTER HATCHERY.

BEDFORD, N.S., December 7, 1901.

Prof. E. E. PRINCE,  
Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I beg to submit my report of operations at Bay View Lobster Hatchery for the season of 1901.

The spring opened earlier this year than for many years past, and the lobster fishery had an early start, therefore I was enabled to commence collecting eggs in boxes at the factories on May 7, and the 16th started the steam pump with 30,000,000 eggs in the jars.

Collections of eggs were made daily (Sundays excepted) up to June 17, from around Pictou Island and along the coast north of Caribou.

The fry first appeared in the incubators on June 10, which was three days earlier than last year, and several days earlier than any previous year.

One hundred and ten millions of fry were distributed in Pictou Bay, around Pictou Island, between White Sands, P.E.I., and in East Bay, Bras d'Or Lake, Cape Breton.

On June 27, I took on board the steamer *May Queen* 6,000,000 of fry and arrived at East Bay at 9.45 o'clock on the following morning.

During the entire passage I took the temperature of the water every half hour, or about every  $4\frac{1}{2}$  miles. I found that the temperature did not vary more than 2 degrees in the whole run of about 130 miles, the lowest temperature being at the southern entrance of the Strait of Canso, and the highest in the Bras d'Or Lake.

I had constructed my distributing barrels with a wire gauze strainer running along the bottom of the barrel with a goose-neck shaped discharge pipe just below the surface of the water at the top of barrel.

This arrangement permitted pure cold water to be constantly pumped, or poured into the barrel, forcing the warm water out without dipping or in any way injuring the fry.

During the trip of thirty hours I did not see one dead lobster in the barrels, but they were as lively when planted in the Bras d'Or as when taken from the hatchery.

Lobsters were larger and more plentiful this season than they have been for many years, and the packers have increased their facilities for extending the business by enlarging old factories and building new ones.

Packers and fishermen speak in the highest terms of the good results of this hatchery, which, without doubt, is preserving and restoring the fishery.

Early in June the fresh water tank fell to pieces, and I had a new one constructed with the department's authority.

During the dry season, in August, I dug a well, 18 feet deep, 11 ft. by 8 ft., which gave a supply of 300 gallons of water every twenty-four hours, while all other wells in the neighbourhood were dry, and the farmers were compelled to haul water a distance of two miles for their cattle.

In October the wharf was thoroughly repaired. It is now in good condition, and should last for many years; some of the old top covering which is good for a year or two, was relaid, but new plank will have to be put down as required.

The steam boiler was fitted with new connections, but a new smoke stack may be required next year.

The necessary repairs about the hatchery for next season will be very light.

I have the honour to be, sir,

Your obedient servant,

ALFRED OGDEN.

## ANNEX C.

REPORT ON OYSTER CULTURE BY THE DEPARTMENT'S EXPERT  
FOR THE SEASON OF

1901.

OTTAWA, December 31, 1901.

To the Dominion Commissioner of Fisheries,  
Ottawa.

SIR,—I have the honour to submit to you my annual report of last season's work, which consisted chiefly in examining and reporting upon the condition of oyster areas in Cape Breton, Nova Scotia and Prince Edward Island, some of which I have not had an opportunity of visiting before; also in preparing grounds for planting oysters in Annapolis Basin.

In *Prince Edward Island* the following places were visited:

*No. 1. Murray Harbour.*—In June I visited and examined Murray Harbour oyster reserve, which had been prepared and stocked with young oysters from Curtain Island last year.

I found the bed clean and looking in a healthy condition; the weed has not grown where it was removed. The oysters are all alive, with no mortality at all noticeable, and growing in a very satisfactory way. During last winter the oysters have thickened very considerably. They were at the time of examining the bed putting a new fin on the shell, which was very fragile, but thickens and hardens as the season advances, and I see no reason why this bed should not prove a success. I have not had an opportunity of visiting the area since, as my time has been otherwise engaged. There should be a responsible warden appointed who has a view of the grounds from his residence and owns a boat, so that if poachers were about he would have an opportunity of ascertaining the names of the parties infringing the regulations.

*No. 2. Trout and Bideford Rivers.*—A petition having been forwarded to the department by a number of fishermen and residents of Lots 12 and 13 praying that certain oyster areas might be protected from mud diggers, and that certain other areas be defined where mud digging may be carried on without injury to the live oyster beds, I visited and examined the above localities in company with Inspector Matheson, and find ample mud, consisting of old beds which have been previously dug upon by the farmers, sufficient to last for a number of years if obtained in a systematic way.

I do not consider the farmers give themselves sufficient time to examine the best ground to work upon. They wait until the ice is sufficiently strong, and then cut holes over an oyster bed and prod it with an iron rod. Not knowing the exact direction the bed runs, they place their digger in a bad position, often making much extra work for themselves besides the damage done to the bed, whereas if they took a boat during fine calm weather and sounded the river they would have a much better idea of the locality and quantity of mud there is in the river.

The area allowed for mud digging in Trout River would be above a line drawn from Peter Miller's middle point to a point of land at the edge of Yeo's Portage road. This is a lower boundary line than [previously given, and incloses more area for diggers to work upon.

In Bideford River the area above a line drawn from Bideford shipward to Colin McKay's Point, including Pawes' Creek, where there is an abundance of mud suitable for farming purposes.

Last winter two diggers were working on a bed opposite Richards' wharf which was estimated to have yielded several hundreds of dollars worth of oysters the previous



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fall, and upon examination found that portion of the ground which was not disturbed literally covered with young growing oysters, and such areas as these I do not consider should be destroyed under any consideration.

Below the above named boundaries, Bideford River may be called one large oyster bed, and to allow the diggers to work there would mean the destruction of the oyster industry in that locality. It was from this river the oysters were selected that were sent to Paris which resulted in gaining the gold medal. It appears to me very forcibly, from information obtained, the farmers do not think of the injurious results of digging just where they choose, but is rather from a selfish motive, desiring to dig mud as close as possible to their own farms, and are dissatisfied if they have to haul it any distance, as they are unable to take as many loads as if they were digging near their own farms.

The department have now taken further action in the matter and have laid off the above areas by an Order in Council which reads as follows :—

‘No person shall dig mussel mud in Trout River, Prince County, Prince Edward Island, excepting above a line drawn from Peter Miller’s Middle Point to a point of land at the end of Yeo’s Portage road.

‘No person shall dig mussel mud in Bideford River, Prince County, Prince Edward Island, excepting above a line drawn from Bideford Shipyard to Colin McKay’s point including Pawes Creek.’

*No. 3. Grand River.*—I made several inquiries as to the closing of this area for one season on account of the large quantity of small oysters noticeable on my last visit. The information received from several residents who are actively engaged and otherwise interested in the industry, are of the opinion that it would not be wise to entirely shut down the fishing privileges of this river as so many are entirely dependent on fishing oysters in this locality during the season, and it is a sheltered river to work in during windy and wild weather that many of the fishermen can earn a day’s work when it is impossible to fish in the bay. They all come to the same conclusion :—(1.) That it would be advisable not to open this river for fishing before October 1, in each year. (2.) That no oysters less than three inches should be allowed to be landed, as the two-inch oysters which they claim is a legitimate size is far too small for market, that it spoils the sample and reduces the stock of growing oysters on their beds. (3.) That a patrol boat and other fishery officers should be on duty during the close season, as after lobster fishing closes, some men have very little to do, and there are persons who will fish oysters previous to the opening of the season and bed them until the season opens, this often causes a glut in the market, and it is only fair that all should start on the same footing. A patrol boat has since been engaged during the last close season in the waters of Richmond Bay and I am informed has given satisfactory results. They consider, and I am also of their opinion, that if the above alterations were carried into effect the oyster fishery would prove satisfactory ; further reference to the above will be found later on in this report.

*No. 4. North River.*—On examining North River and Ellen’s Creek, I commenced at the upper part of the former area and found some mud cuts just below or inside the boundary line, and on the tops of these beds found living oysters showing that the mud diggers had destroyed a portion of the bed by digging through it, and below this a coating of mud was found over the deeper part of the beds, this might or might not have been caused through the sediment of the mud diggers, the beds appeared as if this sediment had not been there long. Lower down the beds were covered over with a growth of mussels, there was only one area of fair size where no mussels were found opposite Dr. Jenkin’s little creek, but from there to the bridge the area was thickly covered over with mussels completely covering the oysters that are growing there. I found several small oysters all over the area, but I have my doubts of this area ever being of much more value as an oyster growing ground, the mussels are very thick, and are growing fast, they collect so much sediment as to completely kill the oyster outright. These mussels would make a capital fertilizer, but I am of opinion the cost of catching them would be more than the farmer would care to pay for them. I did not notice more than half a dozen small star fish, these would be attracted by the large quantity of mussels growing here and would not injure the oysters. Under the above circumstances I do not see that anything further can be done to this once valuable area, as the

beds are in deep water, the channel narrow and intricate and the current is very strong which will not permit fishing only during slack water. The area on which no mussels exist should be preserved until the last and if no change occurs I do not see any reason from allowing the farmers to dig mud just above the bridge.

*Ellens Creek* is an arm situated below the North river bridge and runs up among the flats, the upper part is very narrow and intricate and not much wider than the width of a boat at low water time as the surrounding flats run dry, but widening out to about 30 or 40 feet where it connects with the North river. At the upper part the oysters are much scarcer than formerly, and it has the appearance of the oysters dying through not being worked. Lower down the oysters are more plentiful, especially the small ones. A portion of this ground was leased to a Mr. Hughes, of Charlottetown, but I do not think anything has been done to improve the area. The ground was clean and a good current running through the channel, this is one area which if care and attention were given to it by any individual they might largely increase their stock, but as it is at present is of little value.

In the *Island of Cape Breton and Nova Scotia* the following areas were examined :

*No. 1. Mira River and Catalone Lake.*—In this river oysters were found to be growing above the Albert Bridge, which crosses the river six miles above the entrance. They are scattered along McDougale's shore, which is composed of a very rough, stony bottom and weeds growing very thick along the edges of the river. The water here is very brackish, as the river runs up about thirty miles above the bridge, with several streams running into it, and further up it is quite fresh and very soft. Under and around the bridge oysters are attached to both wood and stonework, also on the bottom which is composed of rough stones. There are large quantities of mussels growing in this river from the bridge down to the sea. Below the bridge off Burke's Point, McClennan's Point, Horne's Point, McDonald's Point and Spencer's shore are a number of oyster beds where oysters are taken in fair quantities, the bottom consists of shells and gravel, but a large quantity of mussels and weeds are growing on the beds, and if these were removed would be of great benefit to the oyster.

At present these beds appear to be in a very dirty condition, owing to the amount of weeds and mussels growing on them. There is a very fair current of water running over these beds, which at times is comparatively clear. One thing particularly noticeable in this river is the quantity of oysters that grow on sticks and stakes that are placed for net fishing purposes, and any one could secure large quantities of young oysters in this way were they so inclined to devote their time to the industry. The shells of these oysters are thin and brittle and would not stand transit any distance. Between the brickyard and King's Island there is quite a bay or cove partly covered with a firm bottom with a growth of weeds, no oysters were found here. Lower down on the opposite side of the river I examined Black Brook and found several oysters attached to sunken roots of trees and logs, the bottom of the river is soft and unfit for cultivating oysters. Oyster Cove is a bay with a very narrow entrance and scarcely any tide, the bottom is muddy and weedy but no oysters were found there. In some parts of the river the bottom is sandy with soft shell clams growing there, at other places the bottom is composed of soft mud. A few oysters are to be found above the Albert bridge, but as the water is nearly fresh they are of little or no value. The beds referred to below the bridge could be cleaned and improved by removing the weed and mussels from them, this refuse would make an excellent fertilizer for the farmer, provided they would take it away if it were placed on a scow.

In Catalone Lake I found very few living oysters, the area is a large one of irregular shape, with several small islands scattered around ; the shores consist of rocks, stone and gravel, sloping off very gradually into deep water, where the bottom is covered with mud, the weeds are very thick around the shores. On nearly every one of the islands and points of land oyster shells were found, they had attached themselves to rocks and stones and have died there. The only place where I found any oysters alive was between the lower island and the mainland, these were in about eight feet of water, on a clean gravelly bottom, they were young and about two inches long. I examined the trestle work of the old bridge and did not find any indication of an oyster there, but on the approaches, which consisted of a stone foundation, were a number of oyster shells



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but no live ones; small mussels and dead clam shells were found on the trestle work. The water was very fresh and brackish and very unpleasant to the taste; there are a number of streams and brooks running into this body of water with only a small outlet which is often blocked up, the sea forcing a bar of sand and gravel across the entrance, this causes the lake to rise considerably by the fresh water running into it. The obstruction is caused by the building of the Sydney and Louisburg railway over the entrance leaving only a very small channel for the tide to run in and out, there is practically no rise and fall of tide in the lake, and the water remains stagnant. Originally the entrance was much deeper and wider, allowing the salt water to penetrate and mix with the fresh water at the head of the lake, but now the greatest proportion of water is fresh, with very little salt water flowing into it. I attribute the causes of death to the oyster to the constantly increasing supply of fresh water, the lack of salt water and the continual blocking up of the entrance, causing stagnant water in the lake, and I do not see that anything further can be done to protect or prevent the oyster from becoming extinct in these waters.

*No. 2. Head of East Bay and adjacent pond.*—Next I examined the head of East Bay between the two bridges. The lower bridge is composed of a long gravelly bar nearly one mile in length, extending diagonally from side to side with a channel in the middle where the bridge is spanned over the opening. On the east side of this bar large quantities of small oysters are to be found growing in from two to ten feet of water, when the bottom of the bay is reached, which is rather steep, the latter is covered over with soft mud.

The area of this pond or space between the bridges is about one mile long, and nearly half a mile wide, the bottom varies from about ten to fifteen feet deep, and consists of a sandy bottom in some places and mud of a soft nature in others. Over this whole area a large number of small beds are found, many of them being no larger than a row-boat, with clusters of very large oysters growing upon them, many of the oysters being a foot long. On the south-west side is a large sandy flat covered with weeds and oysters of a smaller size scattered over the whole area. At the western end of the pond oysters are found along both sides of the shore, also on some narrow ridges lying in about three fathoms of water, where large quantities of oysters have been taken, although they are scarce now. The whole of this area is covered with long eel-grass and sea-weed, which makes the bottom very dirty. It is necessary to have the whole of this weed removed to save the oyster beds, and it is really surprising to find so many live oysters where the bottom is so dirty, although there is a large number of dead shells on the beds. If more time and care had been devoted to these grounds the returns would have been much larger. Oysters were found attached to both bridges, also to trees and stumps which were found lying in the water. There is a large number of mussels growing around the lower bridge, also on some of the oyster beds. No oysters of any importance were found along the shores in the bay below the bridge.

This weed could be removed and the ground cleaned by the use of rakes and dredges with the aid of a steamer. The bridge has no draw to it, which I consider it should have, as it debars small vessels from going any further up the bay, but an opening could be made, if the department should take any steps to have this area cleaned. The channel is also very shallow, but I think a steamer could be got through at high water. If this channel was deeper the beds would be much cleaner than they are at present, as the sediment would be carried off the beds by the current; this is one reason why I attribute the beds being so dirty. Some fishermen have caught quite a lot of oysters here in past seasons, but they are much scarcer now than usual. Several Indians fish around these shores and pick up everything very clean, irrespective of size, which adds to the scarcity. It is sheltered from every wind that blows, and with a deeper channel and clean bottom, oysters ought to still grow in good quantities.

*Big Pond* is situated further down the bay, and there I found a few oysters scattered all around the shores of this pond, which is about one mile long and a quarter of a mile wide. From the western end a long bar of coarse beach, which forms the outside boundary and runs in an easterly direction, where there is a large entrance on the eastern side. The shore is very steep along this bar. On the inside the water is very

shallow and the bottom flat, thickly covered with eel-grass and sea-weed. Oysters are caught here in shallow water, but very few are taken in a greater depth than five feet, and as the water deepens the mud becomes very much softer. The oysters found were of a fair size. Both whites and Indians fish here; the mode being by a dip-net, and now they are very scarce. It is my opinion that over-fishing is the cause of the depletion in this pond, and although larger quantities are reported as caught from Big Pond, yet that is only in name, as oysters taken from other areas are often sold as Big Pond oysters. The other ponds are very similar in their formation, although this is the only one which has an entrance, and I do not see that any further action can be taken here, as there is no area suitable for cultivation.

*Long Pond* is about a mile below Big Pond, and upon examination I found oysters scattered all along the inside and at both ends to the outer side of pond. This area is about one mile long and a quarter of a mile wide. The middle of the pond is about four fathoms deep and is composed of soft mud, the outer side is formed of a very coarse beach thrown up by the action of the sea and is very narrow. The water of the bay is very shallow on the outside of this bar but is very steep on the inside and scarcely any oysters are found growing on its sides.

At the south-west corner the flats run off for a considerable distance, it is muddy and eel-grass is growing on the bottom. The sides of the pond are composed of large stones, and on the eastern end there is a sandy and muddy flat with about ten feet of water over it. Fair fishing has been carried on in this pond in the past. At one time there was a channel running through the outside bar, but now it is closed up by the action of the sea. There is only one place where the water runs over the bar with not more than two feet at the most. The oysters are large and only a small quantity are taken each year. The Indians who have a reservation on the opposite side of the bay also fish here, chiefly with dip-nets. This is done in fine weather and as a rule they are picked up pretty clean. I do not see that any further action can be taken here as there is no entrance for a boat to get either in or out.

*Irish Cove Pond* lies about three miles below Long Pond, and I found this area to be nearly half a mile long and about two hundred yards wide. The sea is encroaching all the time, throwing the bar in and closing up the western end. The length of this pond has decreased a quarter of a mile within the last sixteen years. The entrance is entirely blocked up and no boats can either get in or out, they all have to be hauled over the bar. The sea breaks over the bar in places with about eighteen inches water at high water time. On the inside of this pond we found it to be covered with young oysters lying from the shore-line to the mud, the width varying from ten to one hundred yards, the widest part being at the eastern end, and on the outside of the pond along the bar for about a quarter the length from the east end is covered with growing oysters; further west the bar is very steep and no oysters are found. A few oysters were growing at the western end of pond, but these, I was informed, had been transplanted from eastern side of pond when small by Mr. Malcolm McLean, and are growing nicely. There is about four fathoms water in the middle of this pond, with a soft bottom. The flats on the eastern end run nearly to the middle of the pond and is of a sandy and muddy nature, oysters are growing thick here. Very few men fish in this pond and no Indians have done so up to the present. I consider this to be in a much better condition than either of the other ponds, and unless over-fished I see no reason why a constant supply may not be taken from this area each season.

*No. 3. Malagawatcht and Orangedale Bays.*—A large area of ground near the head of Malagawatcht Bay comprising several acres situated on the eastern side of Lou's Island, and bounded on the north by Shallop Island, the bottom consists of a mixture of sand, gravel and small stones, covered over with weed and eel-grass, sloping very gradually from the shore to a depth of ten or eleven feet water when the bottom becomes softer. There is a good current of water running over this area and oysters are found to be very thinly scattered around here. The place appears to be naturally suited for oyster growing, but the weeds are over-running the area and there seems to be a lack of shells on these grounds.

Another smaller area was found on the southern side of Lou's Island and stretches into a bay towards Sandy Point on the mainland. The bottom is of a sandy nature,



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covered with weed and eel-grass, with a few oysters scattered here and there. The current is not so strong here as this area runs into a hollow of the land and the water is sluggish in its movements.

At the head of Malagawatcht Bay, where the River Dennys empties itself, is another large area of firm ground off McLean's Point, the bottom is very flat, and of a sandy, stony and gravelly nature, weeds and eel-grass are growing here, stretching out from the shore to about ten feet water, several small oysters were found along the shore to about two feet deep, these oysters grow fast, but are picked up very clean in the fall of the year. Oysters are also to be found thinly scattered over the above area; these grounds could be greatly improved if attended to.

Two other areas at this end of the bay were found, one situated between McLean's Island and the mainland, the other off John McAuley's shore; the soil is of a sandy nature, no shells noticeable, and covered with eel-grass, the bottom is comparatively even, the depth gradually increasing when it becomes much softer.

At the lower part of the bay, near the Indian Reserve, there is another large flat area, the depth varying from five to eleven feet water, the bottom is composed of sand covered over with eel-grass; little or no fishing is done here, as it is carried on in shoaler water.

Just above the former area and below the burying grounds, is a bank or middle ground varying from five to eleven feet deep; it is long but narrow, the bottom is firm and composed of sand, stones, gravel, and covered over with mussels and weeds. This area is not suited for the cultivation of oysters on account of the large number of mussels which are growing here, and was previously examined when I was here before. A spit of land off Plaster Island was also examined, but was found to be too small, rough and unsuitable.

One or two other areas were examined between islands around the boom, but the soil was found to be too soft and unsuitable for the cultivation of oysters.

At the entrance of Orangedale Bay there is a middle ground, but the bottom is composed of large stones, and is not suitable for cultivating oysters, although a few are occasionally taken from here, but not in large numbers.

The oysters in this locality appear to be scarce, and I am of the opinion it is caused through over-fishing. The whites and Indians both fish in these waters, using both rakes and dip nets, and by the end of the season the oysters are fished up very clean.

I am also of opinion the most suitable areas for cultivating are those on the eastern side of Lou's Island, and off McLean's Point at the head of the bay.

Should the department take any further action in this matter, a number of small oysters could be picked up around the shores of some of the islands and deposited in deeper water, as many of them must perish during the winter months if left in such shallow water, but before transplanting them it is necessary to have the weed and eel-grass removed, and the bottom cleaned up generally. And after the area is cleaned, it would require a layer of shells to be placed over the grounds, and that appears to be the greatest difficulty, as there seem to be none in the locality.

*No. 4. Mina's Basin, N.S.*—About two miles below Kingsport, there is a ridge running across the bay with about twenty feet of water at low tide, deepening to thirty-five or forty feet. This is considered a good fishing ground with hook and line, and upon examination found the bottom to consist of a large mussel bed with spongy weeds or fungus, some small stones and a few scallops. The area clear of the ridge appeared to be of a firm, sandy bottom, with large stones scattered around. In the south channel leading to Wolfville, the water is deeper and the soil inclined to be softer, with a layer of mud on the surface. The same bottom is to be found above Kingsport wharf. About half a mile below the wharf, the bottom is of a hard, sandy nature with a few shells and small stones, and from three to six feet at low water spring tides. The low water mark extends a long way from high water mark, as there is a considerable rise and fall of tide (about 60 feet), the shore sloping very gradually. The soil is of a hard, sandy nature, mixed with a few small stones and shells, and lower down the bay there is a large area of flat and shelving rocks which extend to low water mark.

Several kinds of shell-fish exist in these waters, viz.: mussels, winkles, whelks (long and round), hard and soft shell clams, razor fish, scallops, borer and crepedula, &c.,

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besides weeds and sponges, but no sign or trace of an oyster was found. The water appeared rather salt, which I am inclined to believe is not very favourable to an oyster taken from where the water is much fresher,

I met a gentleman in Kingsport (Mr. Ray, of Kentville) who was trying to catch the spat from oysters by artificial means, he placed some oysters during the month of May in a tank of water, adding fresh water each day, and having a quantity of shells suspended which he hoped the spat would attach themselves to, he watched them almost daily until the following September, and finding no spat he removed the oysters and found they had grown while in the tank.

*No. 5, Annapolis Basin.*—On my arrival here I found some persons had been experimenting above the Narrows, at Annapolis, the oysters had grown for two seasons and on the third season they found a few crushed oysters, the others had disappeared, and on further inquiries from other sources found, that during a severe winter the ice would pile and become solid above the Narrows, which would settle on the shores and damage anything lying within two or three feet of low water mark, hence the result of the above experiment.

I then examined around Goat Island and the flats below at the entrance of Moose or Clements port river. I found an area which I think would be suitable, situated between Clam shell reef and a spit which runs out from the north-east spit of Goat Island which forms a deep bay, the bottom is of a sandy nature with fair quantities of clam shells scattered over the bottom with about four feet at low water time, the water was clear and the bottom could be distinctly seen in that depth of water. There is also another area suitable, off the western part of Goat Island between the ledges and Clam shell reef, the bottom is very firm and apparently free from silt, and is out of the strength of the swift current which runs in the channel but quite strong enough to keep the area clean. The flats which run off from the shore gradually deepen until they reach the channel and areas could be selected anywhere below Goat Island. I would also suggest at the mouth of Moose River as there is a stream of fresh water running out at low tide. The above mentioned areas are not oyster beds but simply a firm bottom, and although other kinds of shell-fish exist, it may not prove satisfactory or suitable for oyster growing. Shells would be required to be laid previous to planting which would form a foundation to place the oysters upon, also to act as spat collectors. These shells could be obtained from Clam shell reef which runs off Goat Island and dries at about half tide, and scows or boats would be required to remove them to the areas intended for planting.

After submitting the above report of Annapolis Basin, I received further instructions from the department to prepare areas for planting, and proceeded there as soon as possible to carry out the operations as suggested.

I secured the services of a scow which was placed on Clam shell reef on the ebb tide and loaded with shells during low water and on the following tide it was hauled off with long warps to the site laid off on the north side of Goat Island between the north-east spit and Clam shell reef, and a thick coating of shells have been spread over the area. I had one or two favourable opportunities of examining and seeing the work which was in progress and was perfectly satisfied with the results of preparation. So far only one bed was prepared for planting on account of the lateness of the season, the same reason also prevented me from planting any oysters, but I do not consider this any drawback, as transplanting oysters late in the fall there is a large amount of risk with very little to gain, while if planted in the spring they have everything in their favour, with a rising temperature the oysters will start growing and become acclimatized before another winter sets in.

The other areas were too far off to deposit the shells without the aid of steam power, and this I was unable to secure, and my time was fully occupied in preparing the above area.

#### *Change of Season.*

This year the close season for oysters was extended from September 16th to 23rd, and appears to have met with the general approval of all interested in the indus-



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try, as many fishermen have expressed a desire to have the fishing season made shorter, as about the middle of September the weather is generally fine and warm, the result is that large quantities of oysters are caught, the markets are glutted, the price falls, the fishermen have all the work and very little pay for the labour. The oysters too during the summer months grow very fast, the shells at the edges are thin and brittle, and the longer they can be left in the water the harder they become as the temperature decreases, they will also stand packing and transit much better. The oyster itself also improves the longer it is left after spawning and the water becomes cooler.

*Improvement of Oyster Areas.*

Nearly the whole of the oyster areas in the maritime provinces are termed natural beds, that is oysters are found growing on certain areas without the assistance of man, every one has the same right and privilege to fish upon these areas which are often deteriorated by over-fishing and other causes.

It is public property so to speak and every one helps themselves without a thought or care of what becomes of these beds in the future, the demand is becoming greater each year for the oyster, and it is our duty to try and preserve these valuable areas as far as lies in our power. The shelling of private beds at the right season of the year enhances the value of the ground, and often these shells are found to be covered with oyster spat, which largely increases the stock on the beds. The oyster shell is the natural collector of the spat, and if a system could be adopted by which all the dead shells lying around our shores could be collected and piled in heaps, and at the commencement of the spatting season be deposited on the beds I am sure it would add largely to the stock already on the beds and tend to increase the size as well. If the fishermen would only co-operate and assist in collecting these shells I would respectfully suggest, that the department take part and spread the shells over areas in the locality where the shells were collected, and I feel sure the expense would be comparatively small considering the benefit the fishermen would derive in the future. It is a true saying that, what is everybody's business is nobody's business, but I think that such an arrangement could be made with the department, their officers and the fishermen, and probably after consideration some steps might be taken in this direction as it is of vital importance to the industry.

*Size limit.*

Another means of improving the stock sent to market is to increase the standard of size limit. I have so often reported to the department on this matter that I hope before another season opens the size limit for small oysters will be nothing less than three inches. By so doing it will improve the sample sent to market, and what is left on the beds will be fine material for the following season's catch. Unless the oysters are picked and selected the samples are found to be very small and have the appearance of their requiring another season's growth before they should be shipped. The small ones that are culled out are also wasted. This matter requires the department's serious consideration.

TABLE showing the Aggregate Quantities and Value of Oysters caught in the Dominion since 1876, compiled from Annual Reports of the Department of Fisheries.

YEAR.	New Brunswick.		Prince Edward Island.		Nova Scotia.		British Columbia.		Totals.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Brls.	\$	Brls.	\$	Brls.	\$	Brls.	\$	Brls.	\$
1876.....	7,911	23,733	7,905	23,715	1,040	3,120	.....	.....	16,856	50,568
1877.....	7,738	23,214	20,850	62,550	980	2,940	.....	.....	29,568	88,704
1878.....	11,270	33,810	17,902	53,706	912	2,754	.....	.....	30,090	90,270
1879.....	9,420	28,260	18,145	54,435	1,067	3,201	.....	.....	28,632	85,896
1880.....	12,280	36,340	20,297	60,891	1,861	5,583	.....	.....	34,438	103,314
1881.....	8,413	25,239	20,815	62,445	2,270	6,810	.....	.....	31,498	94,494
1882.....	5,859	17,577	57,042	171,126	1,745	5,235	.....	.....	64,646	193,938
1883.....	10,317	30,951	38,880	116,640	1,343	4,029	.....	.....	50,540	151,620
1884.....	11,851	35,553	28,290	84,870	1,595	4,785	.....	.....	41,956	126,458
1885.....	27,368	82,104	28,204	84,612	1,310	3,980	.....	.....	57,132	171,896
1886.....	28,083	84,249	33,125	99,375	1,397	4,191	.....	.....	62,905	189,915
1887.....	23,196	69,588	36,448	109,344	1,716	5,148	.....	.....	61,360	187,580
1888.....	16,384	48,152	35,861	107,588	1,589	4,767	.....	.....	55,034	163,907
1889.....	17,760	53,280	1,257	123,771	2,532	7,596	.....	.....	63,049	189,897
1890.....	16,710	50,130	35,203	105,609	3,013	9,039	.....	.....	56,676	171,778
1891.....	14,934	44,802	41,030	123,090	4,318	12,954	.....	.....	7,000	183,846
1892.....	17,840	53,520	32,937	98,811	3,776	11,328	.....	.....	8,000	167,659
1893.....	16,365	49,095	29,627	88,881	3,488	10,464	.....	.....	55,553	156,440
1894.....	16,960	47,840	24,055	96,220	2,512	8,000	.....	.....	51,080	132,108
1895.....	18,070	52,800	25,463	101,852	2,540	10,160	.....	.....	43,127	132,292
1896.....	14,700	58,800	30,214	120,856	2,400	9,840	.....	.....	1,600	194,296
1897.....	19,835	79,340	20,915	83,660	2,972	9,488	.....	.....	1,200	180,488
1898.....	22,675	90,700	26,484	105,936	2,307	8,388	.....	.....	1,600	217,024
1899.....	17,250	69,000	18,236	72,944	2,027	8,108	.....	.....	2,400	162,052
1900.....	19,240	76,960	17,825	71,300	1,855	7,420	.....	.....	3,000	167,680
Total.....	392,429	1,306,017	707,010	2,284,227	51,821	171,326	22,970	102,550	1,174,230	3,864,120

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*Steamer for Oyster Culture.*

In last year's report I pointed out the desirability of having a suitable steamer built for the purposes of cleaning and examining the oyster areas existing in the lower provinces. As this area is a large one extending along the northern shores of New Brunswick and Nova Scotia, also Prince Edward Island and Cape Breton, it has for some years appeared absolutely necessary to have a steamboat that is suitable in every respect. My past experience of boats of this description has given me a good idea of what is actually required, and as the construction of a steamboat was officially sanctioned, instructions were given to have plans and specifications drawn up, tenders have been asked for, and after some correspondence with the New-Burrell-Johnson Iron Company, Limited, of Yarmouth, N.S., the contract has just been awarded to the above firm, and there is every certainty she will be completed about the middle of May in time for my next season's work.

I have the honour to be, sir, your obedient servant,

ERNEST KEMP,  
*Oyster Expert.*

## APPENDIX No. 13.

## REPORT OF THE FISHERIES PROTECTION SERVICE OF CANADA

FOR THE SEASON OF 1901

By COMMANDER O. G. V. SPAIN.

OTTAWA, December 31, 1901.

To the Honourable  
Minister of Marine and Fisheries, &c., &c.

SIR,—I have the honour to report on the work of the Fisheries Protection and Fisheries Intelligence Bureau services, under my charge for the past season as follows :—

The vessels comprising the fleet are shown in the following table :—

*Acadia*, Commander O. G. V. Spain ;  
*La Canadienne*, Commander W. Wakeham ;  
*Curlew*, Captain Pratt ;  
*Petrel*, Captain Dunn ;  
*Osprey*, Captain Knowlton ;  
*Kingfisher*, Captain Kent ;  
*Brant*, Captain McKinnon ;  
*Stanley*, Captain Brown ;  
*Constance*, Captain May ;  
*Quadra*, Captain Walbran.

This last named vessel was employed, when occasion required, as a fishery protection cruiser on the Pacific coast.

This season, on account of the extra work in reference to patrolling, necessitated by the stringent enforcement of the lobster regulations in different localities, (there are now six different seasons for legally catching lobsters on various parts of the coast), the two vessels *Minto* and *Brant* were placed at my disposal for a short period, during the very busy time.

The patrols of the different cruisers were generally as follows :—

The *Acadia* patrolling the coasts of Nova Scotia, Cape Breton, Prince Edward Island and part of New Brunswick and Quebec, and as usual, generally superintending the fleet.

*La Canadienne*.—This vessel works independently of the rest of the fleet, and was under the charge of Commander Wakeham. Her usual patrol was on the Labrador and Quebec coast. Commander Wakeham's report will be forwarded with that of the fishery inspectors.

*Curlew*.—This vessel is employed in the Bay of Fundy and on the Nova Scotia coast, and has done excellent work in many ways.

*Petrel*.—Again employed in Lake Erie. She has also been very serviceable on occasions, in assisting the lighthouse and buoy service.



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*Osprey*.—This schooner's station was altered for this season and she patrolled the Prince Edward Island and Cape Breton coasts, with headquarters at Souris and Georgetown.

*Kingfisher*.—Stationed on the Nova Scotia and Cope Breton coasts, with headquarters at Canso. Both these schooners have done good work.

*Brant*.—This vessel has been principally engaged in putting a stop to illegal lobster fishing in Northumberland Strait and on the Prince Edward Island coast.

*Constance*.—This vessel has been entirely under the control of the Customs Department, and I understand has most ably carried out her instructions in putting a stop to smuggling.

A report of the details of the work of each captain will be found herewith, together with the more particular movements of the ship under his command.

In addition to the above named cruisers, three tugs were again employed this year, the *Davies*, the *Florence C.* and *Sea Bird*. The first belongs to the department, the other two were chartered vessels. These patrol boats were commanded by experienced officers. The *Davies* from one of the cruisers, and the *Florence C.* and *Sea Bird* by their own captains. The *Florence C.* was attached to the *Curlew* for work, and the *Sea Bird* to the *Kingfisher* for some time, the *Davies* being employed mostly as an attendant on the *Acadia*.

I found that fishermen obeyed the regulations for the protection of the lobsters much better than in previous years. This may be due to the very strict patrol that was kept up all around the coasts.

My thanks are due to the captains, officers and men of the service, who have performed their arduous duties to my satisfaction.

The season, taking it all round, has not been an eventful one, very few United States mackerel seiners being in North Bay, the captains of the cruisers understanding their work, and the Masters of fishing vessels fairly well understanding and obeying the rules, as to exactly what rights they have in our ports.

SCHEDULE of United States Fishing Vessels to which Licenses were issued under the Act entitled 'An Act respecting Fishing Vessels of the United States of America' during the Year 1901.

Name of Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Fee.
				\$ cts.
Samuel R. Crane	Salem, Mass	52	Yarmouth, N.S.	78 00
Arbutus	Gloucester	86	Halifax, N.S.	129 00
Admiral Dewey	" "	78	"	117 00
John L. Nicholson	" "	92	Yarmouth, N.S.	138 00
Columbia	" "	89	"	133 50
Essex	" "	84	Pubnico, N.S.	126 00
Valkyria	" "	104	"	156 00
Fernwood	" "	96	"	144 00
Winona	" "	78	Yarmouth, N.S.	117 00
Maggie and May	" "	88	"	132 00
Levanter	Beverly	28	"	42 00
L. A. Munroe	Gloucester	84	Pubnico, N.S.	126 00
Blue Jacket	" "	86	Tusket, N.S.	129 00
Wm. E. Morrissey	" "	93	"	139 50
Senator Gardner	" "	94	Yarmouth, N.S.	141 00
Talisman	" "	88	Shelburne, N.S.	132 00
Loring B. Haskell	Boston	67	Digby, N.S.	100 50
Parthia	Gloucester	77	Tusket Wedge, N.S.	115 50
Maxime Elliott	" "	75	Lockeport, N.S.	112 50
Mabel D. Hines	Beverly	92	Tusket, N. S.	138 00
Margaret	" "	107	"	160 50

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SCHEDULE of United States Fishing Vessels to which Licenses were issued—*Continued.*

Name of Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Fee.
				\$ cts.
Eleazar Boynton.....	Gloucester "	63	Pubnico, N.S. ....	94 50
Masconoma.....	" "	67	Lockeport, N.S.....	100 50
Helen F. Whitten.....	" "	92	Yarmouth, N.S.....	138 00
Dora A. Lawson.....	" "	93	Liverpool, N.S.....	139 50
Thalia.....	" "	78	Canso, N.S.....	117 00
Margaret.....	" "	79	Shelburne, N.S.....	118 50
Shenandoah.....	" "	77	" ..	115 50
E. E. Wetherell.....	" "	81	" ..	121 50
Puritan.....	" "	62	Lockeport, N.S.....	93 00
Lizzie Maud.....	Belfast "	48	Shelburne, N.S.....	72 00
Ella G. King.....	Gloucester "	52	" ..	78 00
W. H. Moody.....	" "	48	Halifax, N.S.....	72 00
Josie M. Calderwood.....	" "	86	Lockeport, N.S.....	129 00
American.....	" "	99	Liverpool, N.S.....	148 50
C. W. Babson.....	" "	62	Pubnico, N.S.....	93 00
J. J. Flaherty.....	" "	124	" ..	186 00
John Nye.....	Vinehaven, Me.....	39	Yarmouth, N.S.....	58 50
Alice R. Lawson.....	Gloucester, Mass.....	85	Tusket, N.S.....	127 50
A. E. Whyland.....	" "	96	Pubnico, N.S.....	144 00
Mystery.....	" "	89	" ..	133 50
Meteor.....	" "	96	" ..	144 00
Golden Hope.....	" "	75	Halifax, N.S.....	112 50
Lizzie M. Stanwood.....	" "	76	Lockeport, N.S.....	114 00
Anna L. Sanborn.....	Beverly "	17	Yarmouth, N.S.....	25 50
Ruth L. Martin.....	Boston "	63	Shelburne, N.S.....	94 50
Patriot.....	Gloucester "	58	Arichat, N.S.....	87 00
Ella M. Goodwin.....	" "	86	Amherst, M.I., Que.....	129 35
Gloriana.....	" "	76	" ..	114 35
Marshall L. Adams.....	Provincetown "	91	Canso, N.S.....	136 50
Anglo Saxon.....	Gloucester "	72	Amherst, M.I., Que.....	108 00
Sea Fox.....	Provincetown "	71	St. Peters, N.S.....	106 50
Judique.....	Gloucester "	89	Canso, N.S.....	133 50
Frank G. Rich.....	Booth Bay, Me.....	72	Halifax, N.S.....	108 00
Edith M. Prior.....	Gloucester, Mass.....	78	Amherst, M.I., Que.....	117 20
Vigilant.....	" "	87	" ..	130 70
Joseph Rowe.....	" "	97	" ..	145 70
New England.....	" "	59	" ..	88 70
Irving Leslie.....	Bucksport, Me.....	71	St. Peters, N.S.....	106 50
Harry L. Belden.....	Boston, Mass.....	117	Canso, N.S.....	175 50
Bohemia.....	Gloucester "	86	Tusket, N.S.....	129 00
M. B. Stetson.....	Bucksport, Me.....	94	St. Peters, N.S.....	141 00
Nereid.....	Gloucester, Mass.....	69	Halifax, N.S.....	103 50
Preceptor.....	" "	89	Port Hawkesbury, N.S.....	133 50
Epes Tarr.....	Gloucester, Mass.....	48	Yarmouth, N.S.....	72 00
Virginia.....	" "	81	Canso, N.S.....	121 50
Martha A. Bradley.....	Eastport, Me.....	53	Liverpool, N.S.....	79 50
Elector.....	Gloucester, Mass.....	84	Lower Argyle, N.S.....	126 00
Lewis H. Giles.....	" "	94	" ..	141 00
Cosmos.....	South West Harbour "	25	Digby, N.S.....	37 50
Edith Emery.....	Boston "	86	Canso, N.S.....	129 00
Tattler.....	Gloucester "	135	Tusket, N.S.....	202 50
Agnes.....	" "	75	Tusket Wedge, N.S.....	112 50
Edward Trevoyn.....	" "	66	Canso, N.S.....	99 00
A. S. Caswell.....	" "	46	" ..	69 00
Orpheus.....	" "	74	" ..	111 00
Oliver F. Kilham.....	Salem "	43	" ..	64 50
Dido.....	Provincetown "	58	Liverpool, N.S.....	87 00
Georgie Campbell.....	Gloucester "	78	North Sydney, N.S.....	117 00
Emma and Helen.....	" "	62	" ..	93 00
Helen G. Wells.....	" "	66	Canso, N.S.....	99 00
Victor.....	" "	75	North Sydney, N.S.....	112 50
Total.....		6,296		\$9,445 50

Number of vessels.....	82
Amount of tonnage.....	6,296
Amount received for fees.....	\$9,445 50

## SESSIONAL PAPER No. 22

LIST of United States Fishing Vessels which have entered Canadian Ports from October 31, 1900, to October 31, 1901; showing net tonnage, number of men on board and the number of times each Vessel entered the several Ports.

Number.	Name of Vessel.	Net tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Lunenburg.	Lunenburg.	North Sidney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
1	A. E. Whyland.....	96	20															2			1	3
2	A. M. Nicholson.....	100	20									1		1				1		1		4
3	A. S. Caswell.....	46	17	1		2						1						2		1		7
4	A. T. Gifford.....	58	16		2					2										1		8
5	Ada S. Babson.....	99	22									1						1		2		2
6	Admiral Dewey.....	78	18			1	4								1							6
7	Agnes.....	75	18			1																1
8	Agnes G. Gleason.....	44	15															1				1
9	Alice M. Parson.....	42	16							3	3							1				7
10	Alice R. Lawson.....	85	18			2		1		1	1	1										6
11	Alva.....	74	18				2															2
12	American.....	99	18							2				3								5
13	Amy Knight.....	64	19							1												1
14	Anglo Saxon.....	72	18	4		1				1					2							9
15	Anna Sanbourne.....	17	12															5			11	16
16	Annie E. Lane.....	29	15	3										1								3
17	Annie G. Quinn.....	79	18																			1
18	Annie Greenlow.....	69	18			2		2	1									1				6
19	Annie Wesley.....	65	14							1												1
20	Arbitrator.....	72	18				2	1	2		1		1	1	1	1						13
21	Arbatus.....	86	18				2	1	2		1	1		1	1	1	1	2		1		2
22	Arcadia.....	90	19					1														1
23	Arcola.....	85	18					1														1
24	Argo.....	79	18		1			1			1				1	1	1		1			6
25	Arthur Binney.....	112	20			1				2								3				6
26	Arthur D. Storey.....	75	18					1		2								2				5
27	Askona.....	97	18											1								1
28	Atlanta.....	72	18									1										1
29	Belle Franklin.....	75	16		2	1																3
30	Bertha D. Nikerson.....	89	21							1		2										3
31	Bertha May.....	47	16		1																	1
32	Bessie M. Devine.....	91	18									1										2
33	Blanche.....	78	17															2				4
34	Blue Jacket.....	86	18			3												1				1
35	Bomehia.....	86	17			1				3												6
36	Braganza.....	67	16							4		1						2			1	5
37	Canopus.....	47	16																			1
38	Carleton Belle.....	104	22			1																3
39	Caroline Vought.....	48	16							1	2											8
40	Carrie C.....	71	16		1					2	2			1				2				5
41	Carrie N. Balson.....	62	18			2		1		2	2											2
42	Cecil H. Low.....	75	14									1		1					1			3
43	Centennial.....	86	17								1	1		1								2
44	Columbia.....	89	19			4		1						3				1			2	11
45	Conductor.....	51	14								1			1								2
46	Corona.....	82	20							2												2
47	Corsair.....	79	18									1		2								3
48	Cosmos.....	25	12			2																3
49	D. A. Wilson.....	60	17																			1
50	Dawson City.....	49	18															1				1
51	Declator.....	92	20												1							1
52	Dido.....	58	16							1				1								4
53	Dora A. Lawson.....	93	20			1				1		1		1								1
54	Dreadnaught.....	74	19					1														1
55	E. C. Hussey.....	41	18																		1	6
56	Edith Emery.....	86	16			4												1		1		1
57	Edith L. Thomson.....	20	7																			7
58	Edith M. Prior.....	78	19			2								1								4
59	Edward A. Perkins.....	86	18	1		1		1										1				8
60	Edward A. Rich.....	79	16							2	1							5				10
61	Edward Trevoey.....	66	16			2			2	3				1				2				2
62	Effie M. Morrisey.....	83	20							1					1							



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LIST of United States Fishing Vessels which have entered Canadian Ports from October 31, 1900, to October 31, 1901—*Continued.*

Number.	Name of Vessel.	Net tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisbourg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries
63	Eleazer Boynton.....	63	18			2	1			2				1				1				7
64	Electa A. Eaton.....	73	14							1												1
65	Elector.....	84	18											2								2
66	Elenora.....	85	17					1		3								1				5
67	Elizabeth N.....	102	20															1				1
68	Eleza B. Campbell.....	69	18							1								1				1
69	Eliza H. Parkshurst.....	84	18									1		1								1
70	Ella G. King.....	71	18				1			1				1				4				6
71	Eella M. Goodwin.....	86	20			1	1			1					1			4			1	7
72	Ellen F. Gleason.....	42	16				1			2												3
73	Elise M. Smith.....	83	20					1												1		1
74	Emma E. Wetherell.....	82	16								2		2					1				5
75	Emma W. Brown.....	73	16															1				1
76	Emma and Ellen.....	62	18			1	2				1											5
77	Epes Tarr.....	48	15	4		1							1								1	6
78	Essex.....	84	17		2		1							1								4
79	F. W. Homans.....	44	17										1									1
80	Fanny Hayden.....	20	13																	1		1
81	Fernwood.....	96	18			4		1						1							1	6
82	Flaherty.....	124	22											1								1
83	Florence.....	63	14				1			2								1				3
84	Frank G. Rich.....	72	16				1						1									2
85	George E. Lane.....	73	14																			1
86	George F. Edmunds.....	110	19				1											1				1
87	Georgie Campbell.....	78	20								1		1					1				3
88	Gladiator.....	75	18									1										1
89	Gladstone.....	74	15				1					1										1
90	Gloriana.....	76	18			3	1								1			3				8
91	Golden Hope.....	75	18		4	2				3					1	1		3				14
92	Golden Rod.....	98	18			2		1				1		2	2	1		2				6
93	Gossip.....	91	20				1															2
94	Grace Darling.....	47	14	1														1				1
95	Grayling.....	87	19		1																1	2
96	Harry L. Belden.....	117	20														1				1	2
97	Harvard.....	76	19				1			1		1										3
98	Harvester.....	76	20			1	2			3	1							4				11
99	Hattie A. Heckman.....	72	20							1	1							3				5
100	Hattie L. Trask.....	48	13							1												1
101	Hattie M. Graham.....	105	19				1															1
102	Hattie Weston.....	98	21							1												1
103	Hattie and Lottie.....	96	17								1											1
104	Hazel Oneita.....	73	18				2			1								1				4
105	Helen F. Whittin.....	92	19											1							4	5
106	Helen G. Wells.....	66	18			1												2				3
107	Helen M. Gould.....	99	21							2		1	1							1		5
108	Henry M. Stanley.....	83	18								1							4				5
109	Horace B. Parker.....	62	20											1								1
110	Illinois.....	78	20			1	1								1			2				5
111	Independence.....	102	21								2											2
112	Indiana.....	88	22			1				2												7
113	Iolanthe.....	49	14							1								4				2
114	Irving Leslie.....	71	17				1					2						1				2
115	James R. Clark.....	66	16	2						1												3
116	Jennie B. Hodgdon.....	85	20					1	1									1				3
117	John A. McGuire.....	61	17								1											3
118	John L. Nicholson.....	92	18			3						1		1				1			2	7
119	John M. Keen.....	61	14							1	1											2
120	John Nye.....	58	14							3		1								1	1	6
121	Joseph P. Johnson.....	93	18	1						1								2				4
122	Joseph Rowe.....	97	16																	3		3
123	Joseph W. Duffkin.....	80	19				1		3									1				5
124	Joseph Warren.....	49	11							1												1
125	Josie M. Calderwood.....	86	20							1	4							2				7



## SESSIONAL PAPER No. 22

LIST of United States Fishing Vessels which have entered at Canadian Ports from  
October 31, 1900, to October 31, 1901, &c.—*Continued.*

Number.	Name of Vessel.	Net Tonnage.	Number of Men.	Arschat. Barrington.	Canso.	Georgetown, P. E. I. Halifax.	Liscomb.	Liverpool.	Lockeport.	Louisbourg. Lunenbourg.	North Sydney. Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P. E. I.	Whitehead.	Yarmouth.	Total entries.
126	Jubilee...	87	18		1	2				1				3				7
127	Judique...	89	20		2			3			1			2		1		9
128	Juniata...	49	18											1				1
129	Kearsarge...	73	17			1		1						1		1		4
130	Kentucky...	91	20		1									5				7
131	Latona...	71	18				4	2										6
132	Lavanter...	28	12														7	7
133	Lawrence A. Munro	84	18	1	4	1			1	1	1							8
134	Lawrence Murdoch	42	12					1										1
135	Lemuel E. Spinney	92	19					1										1
136	Lena and Maud	75	17			1	1				1							3
137	Lewis H. Giles	96	18		3	1	1				2							7
138	Lizzie M. Stanwood	76	17					2	2		1							5
139	Lizzie Maud	48	18	2	1	1								1				5
140	Loring B. Haskell	67	18		2	1											1	4
141	Lorna Doone	48	16					2									1	3
142	Lottie G. Howard	56	15	2														2
143	Lottie G. Marchant	79	17	1		1					1							3
144	Lucille	71	17		1			1						1				3
145	Lucinda I. Lowell	77	18											2		1		3
146	M. B. Stetson	94	16			1												1
147	M. H. Perkins	50	13					1										2
148	M. S. Ayer	76	16					1						1				1
149	Mabel D. Hines	92	18		3					1				1				5
150	Mabel Leighton	48	14					1										1
151	Madonna	79	18											1	1			2
152	Maggie and May	88	18						1	3				1		1		5
153	Manount	43	16								1			1				1
154	Margaret	79	18	1	1			4			1			2		1		10
155	Margett	107	18		2			1			1							7
156	Marget Mather	66	18			1		4			1			1				7
157	Marguerite	81	20		1			2										3
158	Marguerite Haskins	72	18		1			1	1									3
159	Marsala	54	16					1	1					1				2
160	Marshall L. Adams	91	24		4	1	2						2				1	7
161	Martha A. Bradley	72	16	3	5			2	1				2				1	14
162	Martha D. Nickerson	89	17								1							1
163	Mary A. Gleason	65	16					1						2				3
164	Mary G. Rowell	126	21														1	7
165	Mascanoma	67	18		1			1	5									1
166	Matthew Keaney	66	14					1						2				3
167	Mattie Winship	73	15		2			2									1	5
168	Maud M. Story	53	16		1				2									3
169	Maxime Elliott	75	23		2			1	2	1								6
170	Meteor	96	18		3													3
171	Minnie Davis	26	9														1	1
172	Mist	48	16		1	1												2
173	Mystery	89	18		5													5
174	Nannie C. Bohlin	96	18			2		1	2									5
175	Nellie Dixon	68	18														1	1
176	Nellie M. Snow	61	16		1									1				2
177	Nelson Y. McFarland	65	15			1								3				4
178	Nerrid	69	18		4	1		2	2		2			2				13
179	New England	59	18		2			4			1			1				8
180	Niagara	78	18		1			1							1			3
181	Norinan Fisher	52	16		2			1	1	1				2				7
182	Norumbega	91	18								1							1
183	Norvahoe	91	20					2	1					2		1		6
184	Olga	77	18			1								2				3
185	Oliver F. Killam	43	16	3	2													5
186	Oliver Wendell Holmes	75	17		1			1										2
187	Oregon	79	19								2			2				4
188	Orpheus	74	18		2				7					1				10

1-2 EDWARD VII., A. 1902

LIST of United States Fishing Vessels which have entered at Canadian Ports from  
October 31, 1900, to October 31, 1901.—*Concluded.*

Number.	Name of Vessel.	Net Tonnage.	Number of Men.	Arichat.	Barrington.	Causo.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisbourg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
189	Parthia	77	18			3								2								5
190	Patriot	58	18	3		5		2		1					3							14
191	Pauline	51	15					1														1
192	Pilgrim	69	11															1				1
193	Pinta	68	18					2		2												4
194	Polar Wave	86	17							1												1
195	Preceptor	89	18	3		1									2							6
196	Priscilla Smith	89	17														1					1
197	Procyon	85	18																	1		1
198	Puritan	62	16			1					1	1		1			1					5
199	Pythian	66	16															3				3
200	Ralph F. Hodgdon	59	16					1														1
201	Ramona	58	16					1		1								1				3
202	Richard Wainwright	98	18			1					1			2				1				5
203	Rigel	87	18					1										4				5
204	Robin Hood	65	18		2	3				2					1			1				9
205	Rozella	34	11							2								1				3
206	Ruth M. Martin	93	20			4		1	1	2		1						18		1		28
207	S. F. Maker	78	18			1		1						1			1		2			6
208	S. P. Willard	87	20	3				1	1									4			1	10
209	Samuel R. Crane	52	18																		2	2
210	Sarah E. Lee	74	18			1		1				1										3
211	Sea Fox	71	17					1				1										2
212	Senator	74	18	1		1												1				3
213	Senator Gardener	94	20			1								1							1	3
214	Senator Saulsbury	77	18																		1	1
215	Sheffeyld	61	16		2																	2
216	Shenandoah	77	19			4		1			3							1				9
217	Slade Gordon	88	18							1												1
218	Speculator	77	18					5		1								1			1	8
219	Stanwood	76	19					1														1
220	T. M. Nicholson	90	21						1													1
221	Talisman	88	18			1												3				4
222	Tattler	135	22			5												1				6
223	Thalia	78	16			4		2	6	2	1										3	18
224	Theodore Roosevelt	90	18									1										1
225	Tidal Wave	66	16		2					1												3
226	Titania	77	18						2	1								3		2		8
227	Triton	67	14															2				2
228	Valkyria	104	18			4						1										5
229	Vera	77	18			2				3							1	1				7
230	Vesta	75	16		2				1			1						2				6
231	Victor	75	18											1								1
232	Vigilant	87	18			2				4				1		1		4			1	13
233	Virginia	81	20			3		1	1					1								6
234	Volant	96	18			1								1		1		6			1	10
235	W. E. Morrissey	93	19			4				1				2								7
236	W. H. Moody	48	18			2		2										1				5
237	Walter M. Young	86	18					1									1					2
238	William H. Rider	45	16							1		1						1				3
239	William Matheson	72	17											1								1
Total		17790	4165	17	36	182	2	69	43	152	53	41	5	60	30	1	12	203	3	21	60	990

## OFFICERS' REPORTS.

## REPORTS OF CAPTAINS COMMANDING CANADIAN CRUISERS.

## CRUISER 'CURLEW'.

St. JOHN, N.B., December 31, 1901.

Commander O. G. V. SPAIN, R.N.,  
 Commanding Fisheries Protection Service,  
 Ottawa.

SIR,—I have the honour to again submit to you my annual report on the various operations of this ship during the year just closed, which have extended over many hundreds of miles on the coasts of New Brunswick, Nova Scotia and Prince Edward Island. While life on ship board is presumed to be monotonous by those who do not choose the sea as a profession, the crew of this vessel will truthfully admit that monotony has not been experienced by them since the vessel has been in commission. One day we would be at St. Andrews, swinging to our anchors, and in response to telegraphic instructions from you, in a few hours we could be in sight of the Nova Scotia shore.

We have visited almost every harbour on the coast from St. Stephen, New Brunswick, to Sydney, Cape Breton, and I might say, few indeed are the ports on the coast which have not been called at by this ship.

While it must be admitted that there is considerable unpleasant duties to be carried out by us, still, on the other hand, there are numerous duties devolving on us that can be characterized as anything but unpleasant. A change from one to the other invariably lends a charm and excitement to the work that has many attractive sides to it.

During the winter months, the ship was laid up at a dock in St. John, and during this time the boilers and machinery were overhauled and put in first class order by the engine room staff. The hull and other necessary work around the ship was also carefully looked after, and any repairs required were carried out. I might state here that the bridge was enlarged to nearly double its former size, which we found of great benefit during the season.

Orders were received from you to place the ship in commission on April 15 and with that end in view, work was rushed along and the ship was ready for sea on the date required. Some little delay was experienced in endeavouring to replace the second engineer, who had abruptly resigned his position, and on the 16th we steamed outside St. John harbour and adjusted compasses, which was rendered necessary by the bridge being enlarged.

The control of the valuable fisheries of St. John county having being added to my district in February last, we steamed to Quaco on the 17th inst., to instruct the officer there, and found that the lobster fishermen were arriving daily and locating themselves in the numerous camps, along the shore as far up the Bay of Fundy as Salmon river. The next few days were occupied in visiting the other fishery officers on the St. John county coast, instructing them regarding the management of the valuable lobster and salmon fisheries under their charge.

Arriving in Charlotte county waters on April 20, found an innumerable number of deep sea fishermen anxiously awaiting in the several villages our coming to receive their bounty cheques. This is one of the pleasant duties I am called upon to perform, as these cheques are issued at a time of the year when the fishermen's finances are generally at the very lowest.



1-2 EDWARD VII., A. 1902

I found in all parts of Charlotte county weir repairing in progress, and many new weirs in course of erection. All the fishermen were looking forward to a prosperous season, and, owing to their extreme eagerness to secure desirable weir locations, I was compelled to settle innumerable unpleasant disputes among the enterprising claimants. On the United States side the numerous sardine factories were repairing their plants for the manufacture of the small herring into sardines, and, as the market was quite bare, were looking forward to an active and profitable season. This unusual activity on the American side, of course, had the effect of infusing new energy into the owners of weirs located on the Canadian side of the boundary line, and every one was anxiously looking forward for the appearance of the herring, which usually strike in about the middle of April.

Much dissatisfaction was caused among the Bay of Fundy fishermen by the increased number of vessels that this season entered into the taking of pollock by exploding charges of dynamite among them. Fortunately this method of fishing is only practiced in one section of the Bay of Fundy, off White Head, Grand Manan. Those dynamiters made good hauls by this most destructive and wasteful practice, and it was carried on from April 15, when the schools of pollock were first sighted off Grand Manan, until the beginning of June. At this latter date the pollock had slowly worked from off shore in the waters known to the fishermen of the Bay of Fundy as the 'rippings,' to the inshore grounds inside of the territorial waters, and the fishermen then stopped the using of dynamite. There were many tempting opportunities offered for the use of explosives among the schools of pollock playing in the eddy of the 'Old Proprietor' and other ledges, but the fishermen controlled their desires, evidently not wishing to have their boats confiscated and towed to St. Andrews. It is earnestly hoped by every person interested in our valuable fisheries and their preservation, that immediate action will be taken by the Fisheries Department with a view of having this vile practice discontinued.

Just picture fifteen vessels, the number engaged at this kind of fishing this year, each vessel with from one to three boats busily rowing among the schools of pollock and exploding their charges of dynamite, and as they do not secure more than one-half the fish killed, or, as some assert, not more than one-third, you can form some idea of the immense destruction among the schools of fish.

During the month of May we towed the Marine Biological Station scow from St. John to St. Andrews, where the station itself has been in operation for the past two years. Afterwards the station was firmly secured on the scow for its long tow to Canso almost four hundred miles away.

On May 21 your orders were received to cruise on the Nova Scotia coast as the United States mackerel fleet were beginning to arrive there in their eager pursuit after this valuable fish. Some had already been taken previous to this date by our own fishermen in traps and nets, and the trap at Clark's harbour, Cape Sable is credited with having taken the first mackerel on the coast on May 13.

At midnight on the 22nd we cruised across the Bay of Fundy and the next day called at Yarmouth to bunker ship. Rounding Cape Sable on the 24th, we put into Lockeport at noon, and it being the late Queen's birthday we decorated ship rainbow fashion in Her Majesty's remembrance. Liverpool was reached next day, where dense fogs delayed us till the 31st, when your orders were received to return to Quoddy and tow the Biological Station to Canso.

Since the 13th inst., the schools of mackerel were gradually working along the coast in an easterly direction, and by the 25th, the coast fishermen as far as Canso, had their nets set awaiting their harvest, but the result of the shore fishermen's catch for the year was below the average, although the prices paid were fairly good. The usual number of United States seiners frequented our coasts this spring, but the total catch was only fair and they remained a much shorter period than other seasons.

On May 31, we returned towards St. Andrews, calling into Yarmouth to bunker as usual, and on June 2 moored alongside of Biological Station, St. Andrews. Next morning in a strong gale, tested towing appliances by towing station to Campobello, and finding everything working satisfactorily, steamed next day across the Bay of Fundy to Brier island. The second day we succeeded in safely getting our tow around Cape



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Sable and anchored in Shelburne. The next morning at daylight we made another start, and the breeze sprung up from the southwest, freshening during the day and raising up a nasty sea. At 10 a.m. off Liverpool, the towing gear on board the scow broke, but we succeeded, with little trouble, in picking her up again. At 2 p.m. off La Have the gear on scow broke again, and although a heavy sea was running, we managed to pass a hawser to her and steamed into Lunenburg to repair damages.

A heavy sea and fog compelled us to put into Halifax on the 8th, but on the 11th the weather cleared up, and we proceeded towards Canso arriving there on the morning of the 12th, and we then placed the station in safe quarters.

Leaving there next morning, Arichat was visited, and on the 15th we arrived at Louisbourg to bunker. Bunkers were filled on Monday the 17th and we returned westerly, visiting the several ports on our way. Port Le Hebert was visited on the 19th and 20th in order to examine harbour and report as to the advisability of placing a number of buoys on the shoals and ledges therein. St. Andrews was again reached on Sunday the 23rd, and we resumed our usual work among the herring fisheries in the waters of Passamaquoddy bay.

On July 1, Dominion Day, I took, as ordered by you, sixteen of the ships company with arms and gatling gun, up to St. George, and assisted in their celebration on that day, for which the celebration committee of that town tendered me a letter expressing their approbation.

The member from St. John county to the Dominion Parliament, Colonel Tucker, joined our ship on July 5, at St. John, in order to examine into the herring and other fisheries of the Bay of Fundy, with a view to several proposed changes in regard to them. Colonel Tucker cruised with us over the district until the 21st, when he left the ship at St. John. He expressed the pleasure he had during his stay on board, and the large amount of valuable information that he acquired with respect to the Bay of Fundy fisheries.

While cleaning boilers at Yarmouth on July 24, your telegraphic orders were received to proceed to Digby, and take the Governor General of Canada and Lady Minto, with their daughters and members of the suite on the *Curlew* to St. John. On Sunday p.m. the Vice-Regal party of twelve persons joined the ship, and we proceeded across the Bay of Fundy to St. John. We arrived there at 7 p.m., finding the town and shipping decorated in honour of our distinguished party, and thousands of the inhabitants waiting on the several wharfs, to give them an enthusiastic reception.

On August 2, at St. Andrews, acting in co-operation with the reception committee of the town, we again had the honour of having on board the Vice-Regal party, for a cruise on the beautiful waters of Passamaquoddy bay, including a visit to the summer residence of Sir William Van-Horne, who courteously entertained us. During the afternoon we returned to St. Andrews, although Their Excellencies expressed their desire to proceed to St. John in the *Curlew*, but the appearance of fog rendered this impossible, and the party left by special train for St. John.

Attending to our usual fisheries duties, including the cutting down of an illegally built weir in Lubec Narrows, occupied our time till the latter part of August, when rumours of poaching by Canadian vessels, on the Grand Manan spawning grounds, began to reach our ears. Attempts at poaching annually occur on these spawning grounds, and considerable strife and bad feeling occur among the fishermen in consequence. Warnings have been given to suspected poachers, and we have anchored on the grounds for various periods, but, during our absence from Grand Manan, this illegal work would be stealthily resumed. I decided the time had arrived when more stringent measures were necessary, and at midnight on August 31, we arrived off Seal Cove, and sending the small boats into the cove in the darkness, found seven vessels fishing illegally. Next day I towed them to St. Andrews, and they were all fined, besides losing their fishing gear and time. I feel certain this action will have a deterring effect.

Issuing weir licenses, settling various fisheries disputes, &c., kept us busy till October 4, when we left the waters of Quoddy, and proceeded along the south coast of Nova Scotia in order to be present at the annual sports of our service, to be held at Georgetown, P.E.I., beginning on October 10.

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Arriving at that port on the 9th, we found the other cutters at anchor there, and all the crews anxiously looking forward to the various competitions, of skill, strength, and endurance. On the morning of the 10th, the rifle competition for the challenge cup took place, and this ship's rifle team did not meet with success, which did not surprise us, we having very little time for practice. However, we consoled ourselves with taking back to the shores of the Bay of Fundy, the silver cup offered as a prize for the five oared gig race and the substantial money prize that accompanied it.

Our ship's company also picked up a fair share of prizes in the other events, and on the last evening at Georgetown they showed at the concert given by the fleet in the town hall, that their musical abilities were above the average. It is quite evident to the most ordinary observer, that these annual gatherings of the cruisers for athletic sports, are more enjoyed and appreciated by all as each year rolls by, and encourages a spirit of competition among the ships companies, and its good results are quite perceptible. I have been present at numerous gatherings of seamen, and it cannot be denied that the physique and general abilities of the men gathered annually at Georgetown, can compare favourably with any gathering of seamen that I have been present at.

After returning to the Atlantic coast from Georgetown, foggy weather set in, and putting into Arichat, boilers were scaled, and on October 20, we arrived at Louisbourg and bunkered. Returning to the westward on the 23rd, we called into numerous ports along the coast, and Yarmouth was reached on the 31st, where we filled the space in the bunkers and cruised towards St. Andrews via Brier island.

Finding there a telegram from you to return to Nova Scotia immediately and meet you at Shelburne, where we arrived on November 7. With you on board we steamed to Halifax, returning again to the westward on Sunday the 10th, and met five United States seining schooners cruising off Chebucto Head with evidences around their decks that they had caught some mackerel very recently.

Pasamaquoddy waters were again reached on the 15th, where numerous pressing fishery matters were attended to till the 20th, when in response to another telegram from you, that United States fishing vessels were reported poaching in the vicinity of Liverpool, N.S., we steamed there hurriedly. For several days we searched for evidences of poaching along the coast, but did not succeed in discovering any. Returning around Cape Sable for the last time in the year, we again bunkered at Yarmouth on the 29th, and at Letang Harbour on December 3, Senator Gilmour came with us to Grand Manan, where he presented medals and a gold watch to several life savers there.

The collecting of bounty claims, &c., was vigorously proceeded with till December 24, when we steamed to St. John during a S.S.E. gale, and at sunset, placing the ship out of commission, discharged the ship's company. On the 26th the ship was placed in her winter quarters, and the engineers and their staff proceeded with the repairs to the boiler and machinery.

I have the honour to be, sir,  
Your obedient servant,

JOHN H PRATT,  
*Commanding Curlew.*

NORTH HEAD, N.B., December 20, 1901.

Commander O. G. V. SPAIN, R.N.,  
Commanding Fishery Protection Service of Canada,  
Ottawa.

SIR,—I respectfully beg to present this, my annual report, covering the operations of the cruiser *Kingfisher*, engaged in the Fisheries Protection Service, under my command for the present year.



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The cruising during the season has been confined chiefly to the Gulf of St. Lawrence. On May 16, 1901, after six days in fitting out the ship at Shelburne, we sailed east to Lunenburg, taking up station from Cape Sambro to Shelburne, with headquarters at Lunenburg. I cruised this station until June 4, during which time I sighted ten American seiners operating a long way off shore. We passed numerous schools of mackerel and herring near the shore. Herring were very plentiful on the coast, showing in large schools during the latter part of May. The fish were very fine quality, large and fat and a species of herring seldom seen near the coast. Fish of this kind are caught chiefly on the outer banks, and fishermen call them 'bank herring.' The catch of lobsters was limited on this ground, owing to the prevalence of easterly winds during almost the entire months of April and May, and which caused great destruction among the lobster traps along the coast.

I left this station on June 4, for the east, arriving at White Head on the 5th, fishermen reporting lobster fishing fairly good and mackerel scarce. I visited Canso on June 6, found a few 'bankers' in port flying no bounty flags. On the 7th inst., sent my chief officer to visit the lobster canneries, and he made a seizure of small berried lobsters at Sproule's cannery, for which I imposed the customary fine. American seiners were reported doing fairly well off Canso—about June 5, some vessel reporting 200 to 300 brls., although I cannot verify this statement, as, on account of the weather being fairly good, the seiners were not compelled to make frequent calls for shelter at any of our ports. On June 8, I left this port for Charlottetown, calling at Georgetown on the way, and arriving at Charlottetown on the 11th inst. While there the ship's company was measured for uniforms. A new water tank was also obtained; the old one having given out entirely. I left that port on June 18, with instructions to take up station off East Point, P.E.I., and Cape Breton. I proceeded west through Northumberland Straits, around North Cape and East Point to Souris. The catch of lobsters had been good in this section, notwithstanding the enormous quantity of drift ice, kept in the gulf by the prevailing easterly winds. Three American seiners visited the gulf this season, only remaining two or three days, when they returned to their own coast, mackerel failing to school in the Gulf of St. Lawrence. On the 12th inst., I proceeded to Port Hawkesbury and hauled over on the marine slip on the 15th, to have the ship's bottom cleaned and painted. This was finished on the 17th, and on that day the ship was launched and made ready for sea.

July 20, 200 brls. of fresh mackerel were shipped from Hawkesbury by the ss. *Halifax*, for Boston, all caught in the vicinity of the straits in nets. I remained at Hawkesbury until the 25th, when I proceeded to my station off Souris. On my arrival I continued to patrol the coast on north side Prince Edward Island and the north side Cape Breton. On July 31, we caught a few mackerel off East Point with hook-and-line, first catch of the season. About the middle of August mackerel were reported taking hooks freely at Magdalene Islands; the catch there was very good, some 10,000 brls. being obtained.

Hake fishing was very good off Souris. The continued scarcity of bait made it very hard for the fishermen, as boats had to go to Canso for frozen squid, no bait being obtainable nearer. A few barrels of herring for bait were kept in the new freezer at Souris, but the fishermen claim the prices charged there were too high—more than they could afford to pay.

On August 19, I attended the Georgetown Regatta, boats competing for the cup presented by His Honour Judge Hogston, of Charlottetown. The day was fine with a good breeze and a very pretty race resulted.

On August 28, Souris Regatta took place, boats competing for the cup presented by the Souris Boating Club. This race was not particularly interesting on account of the wind being very light during the day. We had quite a number of visitors, among whom we had the pleasure of seeing Mr. A. W. Owen, Chief Accountant, Marine Department at Ottawa. We endeavoured that the *Kingfisher* give every assistance during the day to the club of which His Honour Judge Wayborton, of Charlottetown, is Commodore.

The remainder of August and September we patrolled the coast carrying out the lobster regulations. Some traps were seized for being fished in the close season. I

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may say the percentage of illegal fishing for Lobsters was much smaller than in previous years. The steam launch *Darvies*, which was sent to me by your orders, proved most useful in enabling us to cover a lot of ground which could not have been done with a sailing vessel.

The ship's company always look forward with much pleasure to the Annual sports which took place at Georgetown on October 10 and 11, under your direction. The prizes for rifle shooting consisted of one large cup open to all the ships of the service, also the smaller cup which is competed for only by the *Acadia* and the *Kingfisher*. It is gratifying to me to report that both these cups were captured by the *Kingfisher*. The boat race for the cup given by the citizens of Georgetown was won by the *Curlew* and was a most interesting race.

By your orders we left Prince Edward Island for Sydney on October 21, via Bras d'Or Lakes—this being my first run through the lakes with the *Kingfisher*. We only remained at Sydney one day. We found the American seiners, six in number, were leaving for home, only one vessel having received a full fare, 380 barrels. These were taken by the gasoline steam schooner *Victor*. Two of this type of schooners were at Sydney, the other being the *Helen Miller Gould* which was burned in the harbour of North Sydney on the morning of October 25. While there I visited both these vessels and was very kindly received and given every particular in regard to their engines, speed, &c. A vessel like the *Victor* carries engines of 85 H.P. four cylinders, and the shaft is made of Tobin bronze  $3\frac{1}{2}$  inches in diameter. The propeller has three blades which are also made of Tobin bronze, two iron tanks of 500 gallons capacity contain gasoline. The ship will steam eight knots in calm weather with a consumption of eight to nine gallons per hour. Captain McFarlane informs me he caught many more fish by having steam to handle his vessel in calms. On October 24, in accordance with your instructions, I proceeded west through the lakes to Shelburne to obtain a new main-mast. We arrived at Shelburne on the 30th, and paid the ship out of commission on November 2, after which I put in the new mast. At Shelburne by your authority some improvements were made in the accommodation of the vessel with which you are already familiar. It became absolutely necessary to put in new rails and this was also done at the time, all of which I respectfully submit.

I have the honour to be, sir,  
Your obedient servant,

W. H. KENT,  
*Commanding Dominion Cruiser 'Kingfisher.'*

SHELBURNE, N.S., November 30, 1901.

Commander O. G. V. SPAIN, R.N.,  
Commanding Fisheries Protection Service of Canada,  
Ottawa.

SIR,—I have the honour to forward you my annual report of work performed by the *Osprey* during the season just closed.

In compliance with your instructions on April 17, I proceeded to Shelburne and after superintending the fitting, painting, &c., on the 22nd signed crew and placed ship in commission, but the weather being very stormy we were unable to get to sea until the 29th. On that date we cruised eastward and arrived at Halifax on the following day, where we signed another man, took in stores, and on May 4 proceeded cruising eastward along the coast, doing general fishery protection work, and arrived at Port Hawkesbury on the 7th, where we were detained until the 9th by heavy north winds, with a large fleet of fishing and coasting vessels bound north, which date we proceeded



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and arrived at Pictou same night, and by your order the *Osprey* went to sea in charge of Chief Officer Graham on the 11th, and proceeded towards Magdalen Islands, to look after foreign bait seekers, while I was instructed to proceed to Halifax by railway to take Dominion government steamer *Minto* to Sable Island. The *Osprey* cruised under command of chief officer until June 4, on that date I joined her again at Port Hawkesbury, and proceeded towards Charlottetown, and arrived at that place next morning. After having crew measured for uniforms, and taking in some stores, on the 7th went to sea cruising northward through the Northumberland Straits and down west end of Prince Edward Island, thence to Cape North, Cape Breton, where we got some very rough weather, during which David Creed, one of the seamen, was badly injured by a blow from a jib sheet, from which cause he lost one of his eyes. However, after a lot of rough usage we arrived at North Sydney on the 10th, and replenishing our somewhat diminished supplies, we again proceeded to sea on the 13th, cruising southward through Main à Dieu passage, then westward towards Canso, where, by your instructions, we took up our headquarters for mails and telegrams, cruising between Liscombe and Sydney. On July 1, we placed ship on marine railway at Point Tupper. After having ship cleaned and painted we proceeded and took same route, cruising as before, until by your further instructions we passed through St. Peter's canal, and came to anchor at south end of Campbell's Island on the 19th, and there awaited the arrival of the Vice Regal party, who came on board Monday 22nd. A guard of honour was formed up and a general salute was given, after which His Excellency inspected the ship's company, and expressed himself as being well pleased. We at once proceeded down the lake passing the Grand Narrows bridge with a fine breeze, and adding to my pleasure their excellencies expressed themselves as having enjoyed the run on our beautiful little ship, (using their words.) We arrived at Sydney the same night, and on 24th proceeded with Her Excellency and two daughters and yourself, entering lake same afternoon. The wind being light we transferred to the *Acadia*. This ship took them to Grand Narrows. We then proceeded and took up station duty as before until by your orders we arrived at Pictou on September 4. Chief Officer Graham was again sent to sea and to cruise off Canso as before, while I was placed in charge of the cruiser *Acadia*, for the run to Quebec and back to Port Hawkesbury, where we arrived on the 22nd. I joined my ship again on that day, and following day cruised south through the strait and took up my old station and cruising as before doing general fisheries protection work until October 9, when we arrived at Georgetown, where the annual sports were held on the following dates, 10th, 11th and part of 12th. Everything passed off pleasantly. The cruiser *Kingfisher* capturing the fisheries protection cup. After which we returned to the station, and on the 28th, by your orders, changed to Cape Breton east coast, North Sydney headquarters, we cruised there until November 2. There being no United States seiners there, we cruised westward through the lakes and passed St. Peter's locks on the 4th, and worked our way westward calling at several ports along southern shore, and arriving off Devil's Island on the 8th, fell in with five United States seiners. Cruising with them till the evening we went into Halifax, leaving early next morning and cruised with the fleet until the 13th, when ourselves and four of the fleet lay at Halifax during a heavy south-east gale. When the weather moderated and the fleet went to sea we still continued to cruise with them until the last of them went west on the 18th. The fleet did not make any big catches and went home with from one to two hundred barrels each. We then took up headquarters at Lunenburg, and cruised East Mahone and St. Margaret's bays until 27th, on which date, by your order, we cruised westward and went into winter quarters at McLean's wharf, Shelburne, on the 28th, and on the 30th, after stripping and mooring ship, and paying off crew, hauled down the ensign and pennant.

I have the honour to be, sir,

Your obedient servant,

C. T. KNOWLTON,

Commanding Cruiser '*Osprey*.'

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QUEBEC, December 26, 1901.

To Commander O. G. V. SPAIN, R.N.,  
Commanding Fisheries Protection Service of Canada,  
Ottawa.

SIR,—In compliance with your instructions I have the honour to submit to you the following, which is a synopsis of the work performed by the cruiser *Constance*, under my command, during the present year just ended, 1901.

On January 23, my chief and 2nd engineers, oiler and stokers began the work of overhauling the boiler and engine, to have all in readiness for the opening of navigation.

February 11, Messrs. Davie & Sons began the work on the new construction to connect the turtle or forecastle deck to the wheel-house and the lowering of the bridge, under my supervision.

March 16, the *Constance* was visited and inspected by the Deputy Minister of Marine and Fisheries and yourself, who approved of the manner in which the work was being conducted to the satisfaction of those interested in its structure. March 28, the *Constance* was towed from her winters quarters in Indian Cove to alongside of Davie's patent slip at Lévis, for the better convenience of forwarding the work to a hasty finish.

April 9.—The work carried on by Messrs. Davie & Sons during the past two months being completed, the *Constance* was at once put into commission. Officers and crew signed ship's articles, and the steamer was moved from Lévis to the Louise Basin, Quebec, where we took in a full supply of coal, fresh water, provisions, &c., and on the afternoon of the 11th we left port for the gulf.

For the convenience of the residents of the north shore and by the permission of the Honourable the Minister of Customs, I received on board, just before leaving port, several large bags of mail matter from the Quebec post office and delivered same at the respective post offices between Godbout and Esquimaux Point, arriving at the latter named port at noon of the 15th, where I received instructions by telegraph from Inspector Jones to proceed at once to North Sydney, N.S., and to cruise in that vicinity until further advised.

On receipt of this order we left Esquimaux Point at once, and the following night (16th) arrived off the entrance to Sydney; but, owing to the large quantities of closely packed ice that extended for several miles off shore all along the coast, we were unable to make harbour, and next morning (17th), on account of strong easterly winds and threatening bad weather, we put into Louisbourg for shelter, where we remained for several days detained by easterly winds and gales, rain and fog. On the morning of April 25, we managed, after passing through miles of heavy scattered ice, to make an entrance to North Sydney harbour, and, as the weather permitted, we cruised in the vicinity of Cape North and Scatteri Island until May 9, when, by instructions received, we proceeded to Meat Cove and seized a whisky still from one John McLennan, leaving the prosecution for this offence to the Honourable the Minister of Inland Revenue.

From May 10 to November 20, our cruise varied greatly, being kept constantly on the move about the coasts of the gulf, Prince Edward Island, the Magdalen Islands, the Nova Scotia coast, Tusket Islands, St. Mary's Bay and the Bay of Fundy.

On this long line of coast work I must here state that the new addition to the turtle deck, which was built to cover in the gap between it and the wheel-house, proved of great value to the safety of the ship as well as to the comfort of those on board when exposed to the heavy seas of the gulf and along the Atlantic coast. It made a great change in the ship by throwing off the water coming over the bows in head seas, preventing the deck from being swept and the compartments from being flooded.

On May 27, I was instructed to proceed to the Magdalen Islands to look out for a large three masted French schooner that was reported to be from St. Pierre Miquelon, and selling liquors to the inhabitants. We arrived at House Harbour next day (28th), and remained about the islands until June 2 investigating this case. The report was true regarding the schooner having been at Grand Entry Harbour, and other places, to purchase bait, but no proof could be obtained that spirituous liquors had been landed or purchased in trade for bait. Again on July 1, along with Preventive Officer Bourinot an investigation was held at Murray Harbour, P.E.I., regarding a report of smuggling



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at that port, but after a careful and thorough inquiry no information could be confirmed against the accused.

On September 16 and 17 we had the pleasure of being at Quebec and taking an active part in the naval parade and other demonstrations in honour of their Royal Highnesses the Duke and Duchess of Cornwall and York. During October 16 and 17 we arrived and anchored in Clarks Harbour, N.S., with Mr. Fred. L. Jones, and others on board, who held an investigation into the looting of the British ship *Drumalis*, stranded on the S.W. shoals near Cape Sable, which resulted in the seizure of the schooner *Hope* by the *Constance* and several articles taken from the wreck, and found on the shore, under the provisions of the Customs Act, sections 193, 194, 196, 197 and 217, and delivered same to the charge of the Collector of Customs at Barrington Passage to be held by him until further advised by the Honourable the Minister of Customs. December 3 we placed the *Constance* in the Louise Basin for the winter, paid off all officers and crew from further active service and left ship in charge of Michel Dickey, my chief steward, to act as watchman, until further advised by the department. During the last week that the crew were on board in port we had the fore peak, chain lockers, and every other available place under deck thoroughly scraped clean of all rust and painted which was very much required for the preservation of the ship.

In conclusion, we boarded and searched all unknown, or suspicious, crafts that we came in contact with during our cruise, and covered 16,504 miles in distance made.

I have the honour to be, sir,  
Your obedient servant,

GEO. M. MAY.

## DOMINION CRUISER 'PETREL'

WALKERVILLE, December 14, 1901.

*Annual Report of the Cruiser 'Petrel' for the Season of 1901.*

Captain O. G. V. SPAIN, R.N.,  
Commanding Fisheries Protection Service of Canada,  
Ottawa.

SIR,—I have the honour to present to you the annual report of the above cruiser for the season of 1901, and as the work performed was varied, with your permission, I will give it in detail for your better information.

The ship, which was laid up in Walkerville, was fitted out and placed in commission on Saturday, April 13, and departed for Amherstburg, where thirty tons of coal were placed on board. On Monday, the 15th, was employed getting the gas-buoys ready for service, putting lamps on, &c. On the 16th both buoys were placed in position and the winter buoy taken in.

On the 17th I seized eighty-nine American gill-nets, which were set in our waters. On the 19th the spar-buoy was placed on Grecian shoal. On the 20th the seized nets were spread out to dry by the crew on the piers and finally were bunched and stored.

On the 25th I seized thirty-one American gill-nets set in our waters. On the 26th the spar buoy was placed on North Harbour reef.

On the 30th I seized fifty-nine American gill-nets set well in our waters.

On May 2 the crew were engaged drying the nets and placing them in stores.

On May 14 the chief engineer of the department, Col. W. P. Anderson, came on board to inspect the light stations, I also took on board a lifeboat for Long Point. From that date until the 17th the following stations were inspected: Rondeau, Port Stanley, Port Burwell, West and East Long Point lights, Port Dover, Port Maitland, Mohawk Island and Port Colborne, when Col. Anderson left the ship. On the way down the lifeboat was landed at Port Dover.

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On the 24th the ship was dressed but no salute was fired. On the 27th Col. Anderson came on board with a diver and assistant to locate the position for the Middle Ground lighthouse, but the weather would not permit any work until the 30th when the spot was located. On the 31st, Mr. Noble, who was in charge of the lighthouse crib, came on board and the *Petrel* accompanied the tug *Home Rule* and barge *Owens*, which had the crib in tow, most of the way. On June 1, the crib was placed in position, several of the crew of the *Petrel* worked all night loading the crib with stone. Col. Anderson left ship on the 3rd at Windsor. On the 4th three large spar-buoys were placed to indicate the extent of the shoalest portion of the Middle Ground Pelee passage, and on the same day I located the wreck of the ss. *Specular*. On the 26th I made a careful survey of the wreck, finding as little as eleven feet of water over portions of the steamer. I placed a black spar-buoy at the east end of it.

July 1 the ship was dressed and a salute was fired of fifteen guns. The crew assisted the people of Port Dover to celebrate the day, and received great praise for their exhibition of rifle, cutlass and physical drills, reflecting as it did great credit to their instructor, Sergeant Hessian.

On the 8th, Mr. Fraser, the assistant engineer of the department, came on board and was conveyed to the south-east shoal lightship, which was successfully located by sextant angles on the 9th. On the afternoon of the same day, Mr. Noble was conveyed to the old 'dummy' crib, being accompanied by the chief engineer, Mr. Brown, to examine the old boiler. On the 10th Mr. Fraser left the ship.

On the 30th, Judge Horne, Mr. Cowan and party came on board at Amherstburg and were conveyed to Pelee island. On the way there and near Colchester light, I was signalled to by the ss. *City of Mount Clements*, which reported being disabled and having the submarine cable on board for Pelee island passage. She was taken in tow to the north dock Pelee island. I afterwards landed the judge and party at the west dock, returning to Windsor the same day.

September 3 I seized twenty-one American gill-nets in our water near Long Point and containing a small catch of fish, principally herring.

On the 10th, while lying at Port Colborne and visiting at a private house, I was requested by the customs officer to hold the American steamer *Hartford* for damaging a bridge, but before I could get my crew, the Americans cut their lines and got away. It would have taken about twenty minutes to get up steam and make chase, and as the *Hartford* was the speedier, I did not attempt to follow.

From the 21st to the 28th I was away from the ship by your orders, *re* the Noble investigation. On October 10 received orders to convey Judge Horne to Pelee island to hold Court of Revision, and on the 11th I returned to Windsor with him.

On the 18th having been instructed to move the south-east shoal gas-buoy to end of cut near the Detroit river light, I took up the anchor and towed the buoy to Pelee island to properly ship the anchor. By this time a gale was blowing from the south-west and had to go to anchor. Did not reach Amherstburg until 6.35 p.m. on the 19th. On the 21st, after exchanging old lamp for a new one, the buoy was placed where Hackett Bros. pointed out as the proper place. Angles were taken for the information of the chief engineer of the department. Two broken spar buoys were taken up for the Hacketts, who have no boat fit for the purpose.

November 9th, King's Birthday, dressed ship and fired a royal salute.

On the 13th took angles to locate the boundary line between the Bass islands and the Hen and Chickens, for the guidance of the fishermen, and placed a buoy.

Eighteenth, I took on board a large spar-buoy which I placed in  $6\frac{1}{2}$  fathoms water on the south east shoal, to mark the position of the vessel and to enable them to place it again in the spring.

On the afternoon of the same day, I seized thirty-seven American gill-nets set in our water. The nets were obtained by grappling. On the 19th I seized fifteen American gill-nets, set in our water a short distance to the east of those seized the preceding day.

On the 21st, took in the middle ground gas-buoy, taking up its anchor which I left at Pelee island, towed buoy to Bois Blanc island, and gave it in charge of Hackett Bros. on the 22nd. On same day took up spar-buoy near the wreck of the *Specular*. On the



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27th I took up the three spar-buoys from the middle ground, also the one from North Harbour reef. I was unable to find the spar-buoy on Grecian shoal, which had evidently been cut down by some steamer, below the water. The buoys were given in charge of Hackett Bros.

On the 29th I met Capt. Hackett, with the wrecked gas-buoy in tow, which I was intending taking in that day, I took it in charge, handing it over to Hackett Bros., and made a special report on the matter. On the 30th, having received a telegram instructing me to assist Hackett in taking up the spar-buoys set along the dredged channel outside the Detroit river. I did so, taking up twelve of them. Most of them had been cut down by steamers and were landed at Bois Blanc island.

On December 6, by your orders, I took a party of gentlemen from Windsor to Amherstburg, thence to Pelee island, returning on the 8th.

To conclude, I beg to report that although a larger number of nets were seized this year than last, I think the fishermen as a whole are more inclined to observe the law, at least while the *Petrel* is in commission, than formerly. They do not dispute the legality of the seizures, as in former years, and have frequently asked me to indicate the boundary line for them.

The fishing on Lake Erie was very uneven. Off Port Maitland it was good most of the season, and Mr. Harris, of Port Dover, reported to me early in the fall, that his fishing had been 50 per cent better than any year since he has fished off Long Point, and I saw myself, eleven tons taken at one lift from a small gang of gill-nets near Pelee island, by one of our own fishermen. On other parts of the lake, the fishing was light during the whole of the year.

You will kindly observe that a large amount of work was done by the *Petrel* for the marine branch of the department, and that the time was fully occupied, 14,132 miles having been logged during the season.

Trusting the foregoing report will meet with your approval.

I have the honour to be, sir,  
Your obedient servant,

E. DUNN,  
*Commanding Cruiser 'Petrel'.*

D. G. S. 'QUADRA',

VICTORIA, B.C., December 26, 1901.

Commander O. G. V. SPAIN R.N.,  
Commanding Fisheries Protection Service of Canada,  
Ottawa.

SIR,—The duties of the *Quadra* not in connection with lighthouse and buoy work, commenced this year with a cruise to Queen Charlotte islands to investigate the wreck of an unknown vessel which had been found by the Indians on the west coast. The wreck turned out to be that of the American ship *Colusa*, and had evidently been where found for more than twelve months. Whilst at Skidegate, Queen Charlotte islands, I examined two excellent salmon rivers from which the cannery, lately established there, were drawing at that early stage of the season (May) some splendid fish. The fish were small but of an excellent flavour, being in that respect more like British salmon than I have yet met with on this coast. Whether the whole of the streams and inlets on Queen Charlotte islands are frequented by this class of salmon, I am not at present prepared to say. Our next cruise was on fisheries service to Rivers Inlet, in the middle of what is generally considered as the busiest portion of the season; hardly anything was being done in the way of making good catches and I regret to say, the season's work at this once hitherto plentiful inlet has not been satisfactory. I understand a hatchery is to be

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established at an early date on the lake at the head of this inlet and my opinion is that such is most earnestly needed. The hatchery on the Lakelse river for the replenishing of the Skeena river, salmon fisheries is already built, and I yet receive reports upon the excellence of the site for hatchery purposes. I met a telegraph lineman at Metlah-catlah on November 26 who had, a few weeks before, been in the Lakelse district, and he informed me the ova of the salmon was then lying on the shore of the lake in immense quantities, the water of the lake having fallen more than usual and left some large gravelly flats dry on which the salmon had spawned. At present, the Lakelse hatchery is in an out of the way district, but should the Kitimat railway be built, the hatchery will be in close and easy communication with the outer world, the suggested railway passing close to Lake Lakelse. When in the neighbourhood of the Skeena river, during the construction of the Lawyer island lighthouse, I was enabled to pay a little attention to the extensive fisheries there, and found on two occasions the weekly close season being infringed upon. Upon sighting the *Quadra*, the fishermen quickly drew in their nets and vanished. This illegal fishing was being carried on outside some large island on the estuary of the Skeena where the fishermen undoubtedly thought they were far beyond the ken of the fisheries guardian.

On September 30, the *Quadra* proceeded with His Majesty's ships to Vancouver and at that port, and from thence to Victoria had the honour of being one of the escort to Their Royal Highnesses the Duke and Duchess of York when they visited this part of the British Empire.

Our latest duty has been the upholding of law and order at Kingcome Inlet, Queen Charlotte Sound, where, in conjunction with the provincial police we were most successful; nine Indians were taken prisoners, and after a careful trial held on the *Quadra* they were sentenced to various terms of imprisonment for the serious offence of resisting and obstructing two police constables in the execution of their duty when arresting two Indians for theft, some weeks before.

I have the honour to remain, sir,  
Your obedient servant,

JOHN T. WALBRAN,  
*Captain, Fisheries Protection Service, Canada.*

*Rev. Charles Harrison, Fishery Guardian, residing at Massett, Queen Charlotte Island, makes the following remarks on Salmon and Halibut.*

November 14, 1901.

*Salmon.*

The sockeyes begin to run in the waters around Queen Charlotte islands about the second or third week in March. The heavy run is generally from the last week in April to the first week in June. The steelheads run in December and again in July. The cohoes begin to run about the second week in August and continue to run until the end of September. The humpbacks and dog-salmon commence about the first of September and continue till the end of November. Special legislation I think ought to be made so as to allow the sockeyes to be caught whilst they are plentiful.

*Halibut.*

I have counted as many as seven schooners fishing for halibut at the same time between Rose Spit and Edenshaw. The men on board were plainly visible to the naked eye. I also noticed that the names of several of the schooners were painted over with black paint so that they should not be recognized. I infer from this that the vessels were Americans. The *Edith* an American steamer has several times been seen in and

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around Massett Inlet and Virago sound. Once she came to anchor three miles above Massett village, and another time she came to the village to get some Indians to pilot her to the best halibut banks. The Indians, however, refused to go as their great cry is that the 'Boston people' are robbing them of their fish.

Several times the Indians have reported that men from American vessels have landed at Rose Spit to kill wild cattle for fresh beef. They have also landed in Virago sound, broken into Indian houses and plundered them. Since I received my appointment as fishery overseer, I have kept a sharp lookout and the Indians have also reported to the captains that I was watching the different inland fishing grounds, consequently they have not poached so much this year. The government ought to enforce the three mile limit and by so doing prevent this continual poaching of Canadian halibut.

Another point I wish to draw your attention to, is the fact that from the middle of June to August 1, the halibut are soft and flabby, as during this time I believe they are spawning and should not be caught. This period I think should be declared a close season, and by so doing would prevent the extinction of this kind of fish. I have seen as many as forty young halibut caught in one afternoon in July by an old Indian, these were not much bigger than full grown flounders. An Act ought to be passed preventing any of these fish under 30 lbs. in weight from being caught. Should any be caught under this weight they ought to be at once liberated. Unless these fish are protected they will in a very short time become scarce, and as the halibut industry is still in its infancy they ought to be protected equally as much as the salmon.

Next year, canneries will probably be in operation up Massett inlet and Virago sound. Should this be the case, I hope the department will allow me a small sum wherewith to engage a guardian at Skidegate and one at Massett, to see that the regulations are strictly adhered to during my absence at either place.

Trusting that what I have written regarding the salmon and halibut in and around our islands will receive your serious consideration.

## CONCLUSION.

In conclusion, besides the ordinary work that the cruisers were employed upon, Their Excellencies the Governor General, the Countess of Minto and Party, were, during the month of July and part of August, conveyed around the shores of Quebec and the Maritime Provinces, taking in the Island of Anticosti. The vessel used for the most part of the time was the *Minto*; but as she could not go through St. Peters Canal, and as it was considered particularly advisable that a trip should be made through the Bras d'Or Lakes, the party were transferred to the *Osprey*, which sailed through the lakes as far as Baddeck, where they were again transferred to the *Acadia* and taken to Sydney. On the voyage back through the lakes, the trip was made on the *Osprey*.

The *Curlew* was also used in the Bay of Fundy.

His Excellency on several occasions inspected the men on parade, and expressed himself as being exceedingly pleased with the uniform, drill and discipline of the men.

The *Acadia* was also used as His Excellency's Flag Ship at Quebec, during the visit of Their Royal Highnesses the Duke and Duchess of York, and she conveyed His Excellency and the Premier down the St. Lawrence to meet H.M.S. *Ophir* on her first arrival in Canadian waters.

It is my intention during this winter, if the department approves, and permission can be obtained from the Department of Militia and Defence, to send some half dozen officers and men to go through a course of instruction in the Citadel at Quebec. It has been the custom to borrow a sergeant from the Permanent Militia to act as an instructor; but I have found this to be most inconvenient for several reasons, and if the above course, as suggested, can be carried out, I am sure it will be a complete success.

Respectfully submitted,

O. G. V. SPAIN,  
Commander of the Fisheries Protection Service of Canada.



DETAILED REPORT OF THE FISHERIES INTELLIGENCE BUREAU  
FOR THE YEAR 1901.

HALIFAX, N.S., December 21, 1901.

Commander O. G. V. SPAIN, R.N.,  
Commanding Fisheries Protection Service of Canada.

SIR,—I have the honour to submit herewith my second annual report of the Fisheries Intelligence Bureau, together with condensed reports of the fishery reporters connected therewith.

In connection with the bureau during the past season, the stations comprised fifty-three reporting and twenty-four bulletin stations.

Three stations were abolished and one new reporting station was established at L'Anse aux Gascons, Qué., in charge of Mrs. A. E. Brotherton.

New reporters were appointed at Spry Bay, N.S.; Sand Point, N.S.; D'Escousse, C.B.; Gabarous, C.B.; Bloomfield, P.E.I.; Alberton, P.E.I.; Shippegan, N.B., and Southwest Point, Anticosti.

The following is the summary received from the various stations showing the results of fishing operations for the season of 1901 :—

## NOVA SCOTIA.

## CANSO

*Report from A. N. Whitman & Son.*

The fishery here and along the surrounding coast has been disappointing in almost every branch of the business.

*Codfish.*—The inshore fishery continues to show signs of diminution, while off shore fair catches have been made, and the bulk of the banking fleet filled up, some of them more than once on the banks contiguous to Canso, while the Grand Bank fishery was practically a failure. These banks lie like a gold mine at the feet of our people and are a much more reliable source of wealth than the average gold mine. The port of Canso continues to be the favourite resort for the codfishing fleet for bait and the renewal of supplies, and seems destined to become a very important centre for the business. A considerable part of the local catch is sold fresh for the Canadian trade, a growing quantity is sent in barrels, salted but not dried, to the upper provinces, and a growing business is being done in boneless codfish for the Canadian and United States market.

*Haddock.*—The winter haddock fishery was of about the usual volume and has become an important source of wealth to our people. During a few weeks thousands of dollars are paid out for haddock, at a time of year when other fishermen along the coast are earning nothing. The smoking of finnan haddies is yearly becoming a more important industry and bids fair to become one of the leading industries connected with the fish business.

*Herring.*—The herring catch has been almost a complete failure along the coast the season through, and it has been impossible to secure an adequate supply for the Canadian trade, let alone any for export. There is a growing demand for smoked kippers and bloaters, and these sweet and toothsome fish are becoming popular. It has been difficult to secure stock for smoking.

*Lobsters.*—The lobster catch, owing to bad weather and other causes not so apparent, was a partial failure in Canso and vicinity, only about half the usual quantity being taken.



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*Mackerel.*—We have to report a very poor season for mackerel, one of the worst known, and the prospect is that the fall catch will be no better. We have not lost faith in the mackerel, we think he is only biding his time. In the meantime, many of our fishermen find it difficult to keep their courage up and their gear renewed.

*Squid.*—We had the usual supply of squid this year but they show an unaccountable inclination to keep away from the traps which used to catch so many, and the fishermen have to depend largely upon the 'jig' for a supply. The usual quantity has been stored for the winter haddock fishery and there will be no lack.

We are pleased to be able to report the removal of the Government Marine Biological Station here from St. Andrews, and that the scientific men who carried on their investigations here this summer in connection with it expressed themselves as greatly pleased with the abundance of material for their purpose. They propose getting to work earlier next season and with a larger staff. These investigations into marine life must be valuable in a commercial sense some time, some way, and specially valuable from a scientific point of view.

*Reporter :—Mr. Frank C. Lohnes.*

*Cod* were first reported May 24, in light quantities and continued so to June 11, 12 and 13, when fair fishing was reported. On May 3, bankers in reported good fares on the banks. Cod struck inshore plenty from the 14th to 22nd and were fair again the last of the month. The July catch was from good to fair, and that of August was fair. Fair reports were received on September 3, 4 and 5, and poor after to October 2, when good fares were made. The fishing was also fair from October 8 to 14. A very heavy storm on October 11, prevented the boats from visiting the offshore grounds as several crafts were more or less damaged by the gale.

*Haddock* were reported in light catches on October 12 and 14.

*Halibut.*—Large quantities of halibut were landed on May 1, by bankers and during the first week of July, about 3,000 lbs. were landed by the local fishermen.

*Herring.*—Struck in first along this coast on June 12, when one trap took 150 brls., and on the following day a catch of 35 brls. was made. The herring fishery was reported very good on June 20 and 21, and fair on the 22 and 24. Light catches were reported on July 15, 16 and 17, and scarce afterwards to the close of the season. On June 17, a number of bankers baited here with herring.

*Lobster.*—Fishing was reported fair the first week of May; poor the second, and fair again from the 14th to 20th. A number of traps were broken the week of May 6, by rough weather. Poor catches were made to the 31st of the month. Lobsters were reported fair on June 1, 5, 10 and 11, and owing to the prevailing easterly winds on the coast, were so scarce after, that a large number of fishermen hauled up their gear on the 15th. Light catches were reported the close of the season, which is considered below that of last year.

*Mackerel*—The first report of mackerel received was when they were reported schooling along our shores on May 22. Light quantities were taken afterwards and several schools were observed on June 29, when fair hauls were made. The fishing was reported fair in July, and on the 13th about 100 brls. were taken. Mackerel were in large schools off this station the week of July 10, and for the balance of the month were taken in catches varying from very good to poor. Very few were reported to the close of the season.

*Squid* were reported in fair quantities on June 28 and 29 for the first. About 150 brls. were taken on July 6, and very few after until the 18th of the same month, when 200 brls. were secured and sold to the bankers for bait. Bankers in on August 1, have a fair supply of bait on hand and reported squid plenty on the banks. Squid were very plenty here from August 9 to 12, and several bankers took advantage of the same. From good to fair catches were reported in September and October.

*Pollock.*—The catch of pollock was about one half of last year.

## DIGBY.

*Reporter J. M. Viets, says :—*

‘Taking the fishing industry on a whole the past season, the fishermen have not much to complain.’ In the spring the weather was very rough and greatly interfered with the halibut fishery, which was not as large in catch as usual. The Digby fleet operated again this season off Yarmouth for halibut and sold their fares at that port, which town received the benefits of the catch.

*Herring* struck in this season better than for several years past and commanded good prices. The movements of herring seem of late years to be very erratic, which was particularly noticed by the very late schooling and catches at Griffin Cove weir in St. Mary’s bay.

*Mackerel*.—The mackerel fishery was a complete failure this season in this district.

*Haddock*.—The fall fishery for haddock has been interrupted by bad weather, but as a rule this fish has commanded a good price. On several occasions the curers of ‘Finnan haddies’ were compelled to give three cents per pound.

*Lobsters*.—Although the lobster catch has pretty well kept up, still the grounds are becoming exhausted. A large catch does not necessarily demonstrate plenty, in fact just the reverse, as more ground has to be gone over and more pots and men employed to keep up an appearance of fair fishing. It is the general impression that fixed and uniform regulations would be beneficial, especially as to the size of the lobster to be caught. The fishermen as a rule, would be pleased, were the minimum size ten inches. This would provide for a reserve supply for each succeeding season, as were the size thus limited the small ones would not be slaughtered as they now are.

## RETURNS of fish for Season of 1901.

## DIGBY DISTRICT, &amp;c.

Sections.	Haddock. — Lbs.	Hake. — Lbs.	Halibut. — Lbs.	Herring. — Brls.	Cod. — Lbs.	Pollock. — Lbs.	Lobsters. — Brls.	Squid. — Lbs.
Digby .....	862,000	970,000	8,000	500	760,000	.....	1,044	.....
Sandy Cove.....	219,000	544,000	.....	.....	163,000	66,300	.....	.....
Freeport.....	568,175	525,875	.....	.....	1,943,200	998,998	783	.....
Westport .....	236,625	281,000	79,500	1,050	634,250	1,883,500	536	100,000
Tiverton.....	260,000	1,312,500	30,000	680	325,000	450,000	650	.....
Totals ....	2,145,800	3,633,375	117,500	2,230	3,825,450	3,398,798	3,013	100,000

## HALIFAX.

*Report : Messrs. A. Wilson & Son.*

*Cod*.—The catch of cod on inshore grounds during the year, has been probably slightly below an average, owing principally to the fact, that fewer fishermen prosecuted this line of the fishing industry.

*Haddock*.—The haddock fishery of last winter, was also below an average in quantity taken, but the shortage in catch was more than counterbalanced by the advances in the prices that were paid.

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*Halibut*.—The season opened about a fortnight earlier than usual, and was slightly in volume above an average catch.

*Herring*.—There were few, if any, early herring taken, and in July none were caught; but a catch above the average was made during August, September and early in October. These fish were of large size and good quality, for the time at which they were taken.

*Lobsters*.—The catch of lobsters is gradually decreasing, and the past season has been no exception in this respect.

*Mackerel*.—The catch of spring mackerel was considerably below an average, both by nets and seines, and was confined principally to the Prospect district. During July exceptionally large catches were made in Halifax bay, also in St. Margaret's bay. About 10,000 brls. of these fish were exported in ice to the United States. The fall catch of fat fish was very small, owing to the abundance of squid, which caused terrible destruction among the netted fish, and prevented the fish schooling along the shore, so that none were taken by seines.

*Squid*.—The supply of squid has been, since August, over abundant.

## A LARGE CODFISH.

One of the heaviest codfish ever seen in Halifax, was brought up to the city Saturday morning by Edward Gorman, of Herring Cove. Mr. Gorman caught the fish off the Cove, and it weighed ninety lbs. It was very broad and thick, and was between five and six feet in length. It gave the fishermen a lot of work when hooked.

*The Halifax Daily Echo*, December 16, 1901.

## LIVERPOOL.

*Reporter: Mr. J. H. Dunlap.*

*Alewives* struck in light quantities to May 13, from which date to June 7, the catch varied from very good to fair.

*Cod*.—Small catches of codfish were taken on May 13 and 15, and on the 16th cod were reported fair inshore, and good on the offshore ground. From latter date to the end of July, the fishery varied from very good to fair, with an occasional poor catch. Good fishing was reported offshore on June 11, 15 and 20. In August cod were taken in catches varying from good to fair, and the September catch was from good to poor. On September 10, bankers in reported fish plenty on the western bank. Good hauls of codfish were taken on October 1 and 8, and fair on the 14th.

*Haddock* appeared in fair quantities on June 18, 19 and 20, and light and irregular catches were taken after until August 9, when the fish was again fair. The fishing was dull after this, until a fair catch of haddock was reported on September 17, and small catches on the 27th and 28th of the same month.

*Hake* were only reported once this season, when fair quantities were taken on June 22.

*Herring* first appeared here, when they were reported plenty on the offshore grounds, on May 25. Light catches were taken inshore for the first on June 5, which continued the same to the end of July, excepting the 5th of the latter month, when fair fishing was reported. Small quantities were taken in August to the 21st, when herring struck in plentiful, with some boats averaging 4 brls. Fair catches were taken on August 24, and September 17. The fishery was poor until September 28, when good fares were taken, and on October 1, herring were plenty, and light catches were made on the 8th. Good catches of herring were reported at Port Mouton on September 14.

*Lobsters* were reported on May 1, in fair catches, which improved to good the following day, and to the close of the season were taken in catches varying from good to poor.

*Mackerel* were first taken on June 7, in light catches, and on the same day one American seiner arrived in with 360 barrels of mackerel. On June 27, one boat had



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thirty mackerel, and the following day boats average from thirty to seventy fish. Light quantities of small size mackerel were taken the first part of July, and on the 17th, mackerel of a very small size were reported schooling in this harbour. From July 19 to 24, traps reported as having averaged twelve, twenty, twenty-five and eighty barrels, and on the 30th, 150 barrels were taken in traps. Mackerel appeared very plentiful on August 1, and from this date to the 21st of the same month, were taken in quantities varying from good to fair. The mackerel fishery was dull after until September 27 and 28, when they were reported plenty on shore, with boat-nets averaging 100 mackerel, and drag seines ten barrels. Fair catches were taken on October 1.

Salmon fishery opened in light catches on May 1, which continued to the 23rd, when the fishing became fair, and from now to the 31st, salmon were taken in catches from good to fair. The June catch varied from fair to poor.

Shad were taken in fair quantities on May 16.

Squid were taken in fair supply on June 17 and 26, and on the latter date good quantities were reported at Port Mouton. Squid were reported in traps at Port Mouton on July 5, and to the close of the month from good to poor catches were taken. For the balance of the season squid were in good supply.

#### LOCKEPORT.

Reporter : Mr. J. R. Ruggles.

Alewives.—A few were reported in brooks on May 1.

Cod.—The first report of cod was received on May 20, when best boats had 30 quintals. The inshore fishery was poor after to the end of the month, but good fishing was reported from the banks and offshore grounds. Good fares were made on June 1, and from this date to July 5, the catches varied from good to poor. The banker *Springwood* arrived with 800 quintals on July 22, and reported fish scarce on the banks. On the 25th, the *Maud Churchill*, 750 quintals; *Lawrence*, 300 quintals, and *T. C. Neckwood*, 800 quintals, arrived, and the *Souvenir*, 550 quintals, on the 28th. In July, on the 4th, the banker *Agatha* arrived in with 700 quintals, and from now to the 15th good fishing was reported daily, with best boats reporting on the 12th; 40 tubs and 75 quintals the following day. Fifty-two quintals was the catch of one boat on the 15th, and the fishing gradually diminished in catches to fair, as bait was very scarce. Fair catches were made in August to the 17th, afterwards from fair to poor until September 23, when cod were reported plenty offshore. The *Springwood*, 1,000 quintals; *Lawrence*, 500 quintals, and *Maud Churchill*, 1,000 quintals, arrived September 5. Cod were fair on the 26th, and good on September 27 and 28, and plenty on October 9, 10 and 11. The banker *Terence Lockwood*, 1,400 quintals, arrived in port on October 14. The total catch is considered below that of last year, and in addition to this, 79 barrels or 2,844 gallons of cod oil were extracted, which is also below that of last season's yield.

Caplin were reported plentiful offshore on June 29.

Haddock.—No reports were received of this fishery, but 40,039 pounds were taken during the season.

Hake were also not reported, but the season's catch will aggregate 20,019 pounds.

Halibut were first reported May 14, when a few were taken, and during the week of the 20th, about six halibut were caught. A few were again reported on June 1 and 14, and the total catch is reported at 5,000 pounds, which is 2,000 pounds better than last season and equals that of 1899.

Herring were not reported this season until August 1, when a few were taken in nets. Small quantities were taken on August 6 and 10, and light and irregular catches were made to the end of the month. A few herring were reported with mackerel from September 25 to 29. Very little was done in this fishery in October, but up to December 1 herring struck in plentiful and large quantities were taken. The fishermen were still prosecuting this valuable industry on December 10, and will likely continue until the run is over. The season's catch is estimated at 5,000 barrels, an increase of 400 barrels over last year's clean up.



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*Lobster*.—The season opened on May 1 and 2 with fair results, which increased to good fishing daily to the balance of the month. Poor catches were afterwards reported to the close of the season.

Number of live lobsters taken for export..... 95,000  
 “ lobsters canned..... 1,217 cases or 56,112 lbs.

In comparison, the number of live lobsters exported was 36,000 in excess of last season, but the quantity canned was 237 cases less.

*Mackerel* made its appearance on June 27, when 150 were reported in nets at Western Head and 50 at Blue Island. On the 29th they reappeared at Western Head, and a catch of about 150 was again made. Mackerel were scarce after during the season until September 25 to 29, when a few were reported with herring in nets. Season's catch estimated at 20 barrels, which is 25 barrels less than last year's catch.

*Clams*.—During the past season 1,214 barrels were taken for bait.

*Squid*.—A small quantity was reported on July 8.

## STATEMENT of Catch of Fish at Lockeport Station for 1901.

Name of Vessel.	Number of Pounds Caught.	Barrels of Oil.
Springwood .....	436,000	10
Maud Churchill.....	442,500	16
Lawrence .....	155,000	15
T. C. Lockewood.....	374,000	15
Agatha.....	231,000	20
Altina .....	85,000	
Charlie Richardson..	65,000	
Jennie B. ....	32,833	
Minnie C. ....	47,466	
Edith .....	80,000	3
Newsboy .....	34,000	
Geneva Ethel.....	100,000	
Icelda .....	51,000	
Fleetwing .....	30,000	
Brittania.....	25,500	
Katie. ....	30,000	
	2,219,299	79
Boats from Port L'Herbert to Blue island .....	450,000	or
	2,669,299	galls. 2,844
Proportion of cod .....	2,606,572	
“ haddock.....	40,039	
“ hake.....	20,019	
“ pollock.....	2,669	
	2,669,299	

## LUNENBURG.

Reporter : Mr. W. A. Zwickler.

Cod were taken in fair catches from May 2 to 24, and from the 25th to 28th cod were plenty and good hauls were made. There arrived on the 29th, five bankers, having an aggregate of 218,400 pounds, namely *Uruguay*, 250 quintals; *Renown*, 200 quintals; *Kuvera*, 600 quintals; *Lila Young*, 550 quintals, and *Basil Geldert*, 350 quintals. Fair quantities were taken from May 31 to June 5, after which the fishing was poor until the 13th, when fair hauls were again reported for the next five days, and poor to the

last of the month. Fair reports were received in July from the 1st to 7th and 17th to 31st, with poor intervening. During August, dogfish were very much in evidence, and fair results were obtained the first, second and last weeks. From now to October 12, from fair to poor fares were taken, and on the 14th good reports were received. The total shore catch this season was an average one.

*Haddock*.—Fair quantities of haddock were reported during the season, but the catch is below the average.

*Herring*.—The first bank herring were caught May 18, when one boat had 5 barrels. The 21st and 22nd the catches were fair, with boats averaging 200 herring. From the 25th to 27th the catch was good; 28th to 31st poor; June 1 to 3, fair catches were made, poor 4th to 10th. From 12th to 15th bank herring were very plentiful, with some boats averaging 20 barrels. A few herring were taken on the 27th, and very scarce in July. From August 17 to 24, the catch was good, and from the 26th to September 11, poor. On September 12 and 13 the catches were fair; 14th to October 7, poor, and fair after the 12th of this month. The catch of bank herring was the best for years, and that of the summer and fall was below the average, owing to the numerous dogfish, that prevented the fishermen from setting their nets.

*Lobster* fishing commenced December 15, 1900, and to the end of the month good fishing was reported. In January the catches were fair, and poor in February and March. Fair reports were received during April and May. The largest lobsters caught between the dates of December 15 and April 30 were exported alive to the United States, the remainder, large and small, were sold to the lobster packers for canning purposes. The catch this season was an average one and the prices obtained for the large ones exported were higher than in 1900, but the packers did not pay as much as they did last year, owing to an agreement perfected the early part of the season.

*Mackerel*.—The first mackerel taken this season was on May 18, when one boat reported a catch of 5 barrels, and fair hauls were made from the 21st to 27th. From the 28th to 31st the catch was poor. The fishery was reported fair June 1 to 5; poor, 6th to 26th; fair, 27th to July 6; poor, 8th to 13th; good, 15th to 20th, when traps had 100 barrels; fair, 22nd to 25th; good, 26th to 31st, with traps reporting 50, 80 and 100 barrels. Fair catches were taken August 1 and 2; poor, 5th to 8th; good, 9th to 12th; fair, 13th to 21st; good, 22nd, traps had 125 barrels; fair, 24th; poor, August 26 to September 13; a few being hooked daily from September 14 to October 4; fair, October 9 to 15; good, 16th to 25th. It is reported that the fishermen had the best net and trap fishing at this station for many years, notwithstanding that squid destroyed about half the mackerel that were caught in the nets in the month of October. The total catch for the season was better than 1900, which was considered the best for a good many years.

*Squid* were plentiful in Chester bay from June 26 to July 31, and during September and October, our bays, harbours, &c., were teeming with this little bait fish. The bankers reported a fair supply of squid on the banks from June 25 to the close of the season.

*Dogfish* were very plentiful and troublesome on our shores this season, and bankers reported the same on Middle Querro and Bradley banks.

Subjoined is a list of the Lunenburg vessels engaged in the bank fisheries during the year of 1901.

#### MAHONE BAY BANKING FLEET.

	Lbs.		Lbs.
J. W. Mills .....	440,000	Hazel B. Mosher .....	270,000
Vernie May .....	360,000	Hattie L. M. ....	240,000
Dietz M. ....	380,000	C. U. Mader .....	310,000
Loyal .....	400,000	Unique .....	380,000
Blanche A. Colp .....	420,000	Flo. E. Mader .....	320,000
Elva M. ....	300,000	Senovar .....	200,000
Lawrence .....	300,000	Kimberley .....	300,000
Snow Queen .....	250,000	W. S. Wynot .....	270,000
Mildred .....	300,000	Clara .....	260,000
Harold .....	300,000	Crofton McLeod .....	300,000

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## LUNENBURG BANKERS.—(TRAWLERS), LAHAVE.

	Lbs.		Lbs.
Yukon.....	360,000	Talmouth.....	260,000
Merl M. Parks.....	430,000	Flora W. Sperry.....	300,000
Maderia.....	350,000	Alma Nelson.....	480,000
Citizen.....	390,000	Ophir.....	230,000
Millie Mace.....	260,000	Jennie Myrtle.....	430,000
Glyndon.....	320,000	Majestic.....	380,000
Barcelona.....	310,000	Guardian.....	400,000
Uruguay.....	410,000	Karmoe.....	410,000
Monitor.....	180,000	Mindoro.....	200,000
Emulator.....	300,000	Pearl Evelyn.....	300,000
Reliance.....	315,000	Pacific.....	300,000
Athlon.....	440,000	G. S. Troop.....	350,000
Carlrairie.....	300,000	Collector.....	340,000
Hugh John.....	410,000	Grace.....	380,000
Premier.....	360,000	Pilgrim.....	370,000
Avis.....	320,000	Cyril.....	250,000
Comrade.....	280,900	Mariner.....	300,000
Victoria.....	360,000	Harold J. Parks.....	310,000
Protector.....	320,000	Scintilla.....	300,000
Ivanhoe.....	370,000	Latooka.....	340,000
Moran.....	310,000	H. H. Kitchner.....	300,000

## LAHAVE NORTH BAY FLEET.

	Lbs.		Lbs.
Willie C.....	390,000	Yosemite.....	400,000
Ungara.....	370,000	Lillian.....	380,000
Companion.....	440,000	Concord.....	260,000
St. Vincent.....	160,000	Cambrian.....	275,000
Rowena.....	210,000	Perfect.....	150,000
Lottie.....	260,000	Albatross.....	60,000
Annie C. Hall.....	260,000	May Myrel.....	380,000
Tidal Wave.....	240,000	Fern.....	210,000
Algoma.....	130,000	Brittania.....	140,000
Kivera.....	280,000	D. M. Owen.....	330,000
L. Morton.....	150,000		

## LUNENBURG BANKING FLEET.

	Lbs.		Lbs.
Nonpareil.....	380,000	Gladys B. Smith.....	480,000
Minnie B.....	15,000	Basil M. Geldert.....	390,000
Ahava.....	240,000	Brittania.....	260,000
Harry Smith.....	280,000	Lena F. Oxner.....	420,000
Dove.....	320,000	Renown.....	270,000
Robert F. Mason.....	330,000	Columbia.....	360,000
Luetta.....	440,000	Aguadilla.....	430,000
Arcana.....	280,000	Tyler.....	235,000
Huron.....	320,000	Tasmania.....	420,000
Kuvera.....	420,000	Aleaca.....	320,000
Beatrice L. Corkum.....	380,000	Shamrock.....	240,000
New Era.....	330,000	Secret.....	220,000
Wisteria.....	290,000	Mizpah.....	310,000
Werra.....	280,000	Baden Powell.....	280,000
Hilda C.....	400,000	Mascot.....	300,000
Palatia.....	380,000	Atlanta.....	400,000
Colonial.....	280,000	Ellen Maxner.....	280,000
Viking.....	415,000	Lilla B. Hirtle.....	420,000
Frances Willard.....	200,000	Torato.....	240,000
Bona Fides.....	280,000	Peerless.....	240,000
Defender.....	300,000	Roma.....	425,000
Dictator.....	250,000	Diego.....	80,000
St. Clair.....	360,000	St. Helena.....	240,000
Demering.....	280,000	Hazel, L. K.....	320,000
Clarence Smith.....	380,000	Maggie M. W.....	380,000
Strathcona.....	300,000	Panama.....	420,000
Bonanza.....	320,000	J. M. Young.....	220,000
Milo.....	300,000	Alhambra.....	320,000
J. A. Silver.....	260,000	Muriel.....	440,000
Luisetta.....	280,000	Minto.....	300,000
La France.....	230,000	Minnie J. Heckman.....	
Kandahar.....	300,000	Alberta.....	360,000



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## MAHONE BAY LABRADOR MEN.

	Lbs.		Lbs.
Nova Zembla.....	130,000	D. A. Mader.....	100,000
Ella.....	60,000		

## LUNENBURG NORTH BAY FLEET.

	Lbs.		Lbs.
Harry Lewis.....	160,000	Maggie E. Z.....	240,000
Minnie M. Cook.....	300,000		

## LUNENBURG LABRADOR MEN.

Jennie May.....	260,000
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## MUSQUODOBOIT HARBOUR.

*Reporter : Mr. George Rowlings.*

*Alewives* were only taken in the month of May with light catches on the 14th, 21st and 25th ; fair on the 18th ; and good on the 22nd. It was reported that alewives were more plentiful in Lake Porter and Ship Harbour this season than for some time past, with an increase of 125 barrels in the total catch.

*Cod*.—The fishermen along this portion of the coast do not pay their attention to any other kind of fishing but lobsters with very few exceptions, until about the middle of June, when the crustaceans become scarce. The majority of the fishermen then begin codfishing, which was first reported this season on June 3, from which date to the end of the month the catch was on an average fair, excepting the 5th and 11th, when codfish were reported plentiful. The July and August catch varied from good to poor, but September proved an exceptionally successful month, with catches varying from good to fair from the 2nd to 11th, and again from the 20th to 28th. The month of October was very stormy, which prevented good fishing, and codfish were only reported fair on the 8th and 9th. During the past season, 60 cwt. more were taken in this district, as compared with last year.

*Haddock* appeared plentiful on June 11, and were taken in fair quantities after for the balance of the month. For the remainder of the season, the catches were almost identical with cod. The total catch is about the same as last year with a slight increase.

*Hake* is always reported in small quantities along this coast, and about 1,400 lbs. were taken the past season.

*Halibut* were reported fair on the 3rd and 4th of July. Total catch about  $\frac{1}{3}$  short of last season's.

*Herring* were not plentiful at any time during the season, and the catches throughout June, July, August and September were light. The total catch this season is considered a poor one. In 1900 the catch was 2,966 barrels, while this season only 1,373 $\frac{1}{2}$  barrels were taken.

*Lobster* season generally commences at this station about the first week in April, and from the 15th of same month to the last of May is always the best fishing. Lobsters this season were first reported on May 1, in good quantities, which varied from this to fair for the balance of the month. The June catch was light. Lobsters were not as plenty this year as last. 3,864 lbs. less were canned and nearly 50,000 lbs. less were shipped alive.

*Mackerel* were first reported on June 5, fair, and poor after until July 2, when fair quantities were again taken. Small stops were made afterwards to the 22nd and on August 1, mackerel again struck in fair. Light catches were reported after for the next nine or ten days, after which the fishing was very poor to the 20th of September from whence to the 28th the fishery varied from fair to poor. The mackerel caught this season were all taken in nets. Not a stop was made with seines and the total catch is somewhat less than last year.



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*Salmon*.—Light catches were reported on the 18th and 31st of May, and 4th and 5th of June, but on the 15th and 17th of the latter month, salmon struck in plentifully and good fares were made. It is reported that salmon were more plenty this season than last.

*Pollock* which were always fairly plenty at this station, were scarce this season and only a little over one-half as many were caught this year as last.

*Trout* were reported fair on the 22nd and plenty on May 31. In June, on the 15th, fair reports were received and light on the 17th and 28th.

*Clams*.—Two factories at Clam Harbour put up about 275 cases of clams this fall.

Total catch of fish taken in the district, from Dartmouth, N.S.

Alewives .....	287	br'ls.
Cod .....	8,584½	cwt.
Haddock .....	69,458	lbs. fresh.
Haddock .....	820½	brls. dried.
Hake .....	7	cwt.
Halibut .....	22,955	lbs.
Herring .....	12,900	lbs. fresh.
Herring .....	1,373½	brls. salted.
Lobsters .....	112,945	cwt. fresh in shell
Lobsters .....	65,736	lbs. canned.
Mackerel .....	11,600	lbs. fresh.
Mackerel .....	480½	brls. salted.
Pollock .....	685½	cwt.
Salmon .....	3,229	lbs. fresh.
Fish as bait .....	845½	brls.

*Reporter* : Mr. W. Taylor.

*Alewives*.—Very few were reported in April, May and June.

## PORT LATOUR.

*Cod*.—Cod were first reported on May 8, in fair quantities and on the 10th a few boats that were out found good signs of fish and returned with about 1 quintal per man. The following week the fishing was very fair and as lobsters were beginning to slack off, more men took to codfishing and good steady work was done, with the result that the codfishermen averaged 1 quintal or perhaps a little better per man. Bad weather then set in and the catches fell off, not really on account of the scarcity of fish. The fishing the early part of June was fair and steady averaging 1½ quintal per man. Bait now became scarce and men had to depend wholly on clams. The week of June 17 commenced with fine work for the fishermen. Plenty of cod and herring. Bait on the outer grounds. The larger boats and shallops did well. Dogfish now appeared and troublesome, eating the nets badly. The fishing in July was very dull owing to bad easterly weather and dogfish, which prevented the boats from getting bait on the grounds, so much so that many men took to haymaking. Fairly good fishing was reported in August but light catches in September until the week of the 28th which has been the best for the season. Although the weather was rather windy, still the fishermen have been getting from 2 to 4 quintals of cod and pollock per boat with two men. The catch was very steady for the entire week. During October the fishing varied from good to poor. The season's catch is estimated about double that of last year's and totals to date 2,000 quintals or more, a large proportion of which being big and medium size fish.

*Haddock* although not reported, is considered in advance of last seasons's catch and will total from 300 to 400 quintals.

*Herring* were first reported by shallops on the fishing grounds on May 25 and again on June 4 and 8. They did not strike in shore until July 12, 13, 15 and 16, when

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a few small fish were netted, which were of great assistance to the fishermen. Herring were again reported plenty by shallops during the week of July 22. The fish did not mesh well and the fishers used their nets to good advantage and thus secured sufficient for bait. Light catches were made the first of August but the week of the 19th turned out fair for the boatmen and quite a stop of herring was made. Some quite small, however, were salted for lobster bait, and a few boats had 5 brls. but the average was not over 2 brls. per day. Fair fishing was reported from September 12 to 31, during which the boats stopped from 1 to 6 brls. of fat and large herring. In October, an occasional boat got a large haul of 7 or 8 brls. of fish in the mornings. The total catch for the season is at least 200 per cent better than last year.

*Lobster* season opened the first week in April with rather rough weather. The strong easterly blows destroying much of the gear already set for operating this important industry. Fair catches were made from May 2 to 18, and to the close of the season lobsters held their own. This fishery this season was on an average good. High prices were obtained almost the entire season for those exported and the amount received for the small fish sold to the packers was in advance of any previous year, making the season's work in this branch most satisfactory. Our reporter, says in reference to lobster-fishing: 'That I hope the government will not grant an extension of time, I believe the grounds will be wholly depleted before many years, without any longer season.'

*Mackerel* were first reported on August 2, when 1 boat had 78 fish and again on September 30 in fair quantities but no appreciable quantity of mackerel has yet been taken.

*Pollock*.—Some good fares of pollock were taken the last week in June.

*Squid* were reported plenty on August 8 and 9 and scarce afterwards until October 7 when good catches were made up to the 16th.

The catch in general at this station has been much better than last year, and in consideration of the large increase in catch in almost every branch and prices being good, the season has been a most profitable one for the fishermen. The indications are that the remainder of the season will yet enlarge the voyage materially.

#### PORT DUFFERIN OR SALMON RIVER.

*Reporter: Mr. Arthur Balcom.*

*Alewives* were reported very good on May 18, and from fair to poor after to the end of June.

*Cod* first appeared on the 28th of May and from this date to the later part of June were taken in fair and regular catches. From the 1st to 5th of August, very good fishing was reported and fair on the 6th and 7th, afterwards scarce for the balance of the month. Fair catches were reported daily during September to the 27th and 28th, when good hauls were made. The October catch varied from fair to poor, on account of rough weather.

*Haddock* were reported fair on September 7, and were taken in catches varying from fair to poor during the month. The catch improved somewhat in October and good fares were reported on the 1st, 8th, 10th, 11th and 12th and fair on the 7th and 14th.

*Lobsters* were reported in very good catches this spring from the opening of the lobster season to the 15th of May, after this to June 5, from fair to poor. Rough weather prevented further prosecution of this fishery during the remainder of the season.

*Mackerel*.—Fair catches of mackerel were reported on May 28, also the first week in June. Similar fares were reported the early part of July, and the August and September catch was on an average fair. Mackerel were reported schooling off Beaver Island on July 1, and off Beaver Harbour Head on August 8.

*Salmon*.—Fair catches of salmon were reported on the 5th, 8th and 28th of June.

*Squid* struck in fair the last week in June and from fair to poor in July.

*Trout*.—Trout of a small size were reported on May 18, and the catch to the end of the month varied from very good to poor. Good to poor fishing was reported in June and July.

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*Smelts.*—Very good quantities of these small fish were taken the last of May and fair catches the first week in June.

## PORT MULGRAVE.

*Reporter: Mr. David Murray.*

*Cod and Haddock* have been scarce all over the fishing grounds this season and the total catch is considered about one-half in comparison to previous years. For week ending April 11, vessels arriving from the banks reported fair catches of cod from one baiting. Some boats had 200 quintals. Owing to the scarcity of fish here the first week in June, several vessels sailed for the North Bay, where the prospects were reported better. On May 13, bankers in reported good fares on the western banks.

*Herring.*—The spring herring were very plenty at this season at Harbour Bouché, Bayfield and Tracadie, but it was difficult to find a market for the same as the fleet of bankers had left for the Magdalen Islands. On June 12, herring were reported plentiful at Cape Hogen. A stop of about 100 barrels was made this season at the north lighthouse, Cape Jack, but on a whole this fishery has been a complete failure.

*Lobsters* throughout the first part of the season were fairly plentiful, and it is safe to report that enough lobsters were caught to pack 1,600 cases; in fact one firm's packing almost reached that figure.

*Mackerel* did not visit our waters to any extent this season. A few were caught this summer at Bayfield, but not of sufficient quantity to report as compared to other years. Mr. Murray says: 'We don't get one herring or mackerel now, where we used to get hundreds and thousands of barrels of fish. My belief is that lobster pots with decomposed bait in them, and with so many small steamers running about purchasing lobsters have caused the fish to leave our shores'.

*Squid* has been very scarce throughout the season.

## PORT MALCOM.

*Reporter: Mr. R. G. Proctor.*

*Alewives.*—First reported on May 24, the catches were light up to the 10th June.

*Cod.*—The operations of this important industry at this station were entirely suspended this season on account of the scarcity of codfish on this portion of the coast. The catch of cod was a poor one and the only favourable report to the bureau was on the 16th September, when cod were reported fair.

*Herring* struck in fair quantities on the 27th and 28th of May and were scarce afterwards to the 7th of June, when the fishing varied from good to fair to the 22nd. On the 24th there was an improvement in the catches and good hauls were made each day to the 28th. Herring were reported fair on the 5th of July and again on the 16th of September, with very light fares between both dates. A few were also reported to the 3rd of October. The catch is considered a good one.

*Lobsters.*—The bay being clear of ice early in the season, the lobster fishery was vigorously prosecuted, and the first report received reported fishing fair on May 1, which increased to good, and during the following week very good catches were made, varying from this to fair to the 20th of the month. Poor catches were made after until the 21st of June, when lobsters were reported again very plenty and scarce after to the close of the season. The catch is considered a fair one.

The F.P.S. cutter *Osprey* was in port on August 8, and during the season several bankers, two of whom were Americans, baited here and the fishermen did fairly well. The season's catch in general is not considered as good as last year's.



## EAST PUBNICO.

Reporter : Mr. J. A. D'Entremont.

Although some branches of the fishing industry have not been very satisfactory, on the whole the season's work is considered a fairly good one.

Cod season opened on May 18, with light catches and continued so until about June 22, when good hauls were reported. Fair catches were taken throughout July and August, and on August 29, the schooner *Civilian* arrived with 1,400 qtls. codfish, and reported fish scarce on the banks. Total catch for the season is considered a good one.

The following are the vessels engaged in the codfishery at this station, with their respective catches :—

A. M. Bell	250,000	lbs.
Aurora	200,000	"
Civilian	400,000	"
Hazel Dell	215,000	"
Flora	200,000	"
N. A. Laura	200,000	"
Senora	200,000	"
Marguerite	150,000	"
Souvenir	200,000	"
Lucy	150,000	"
Hazel Glen	125,000	"
Dawn	190,000	"
Nebula	100,000	"
Eddie J.	110,000	"
Carrie May	90,000	"
Sea Foam	75,000	"
	<hr/> 2,855,000	lbs.

Herring were very scarce this season until about July 10, when 1 brl. in a trap was taken. Herring was reported the following day as having struck in off Murder Island, and again off Green Rock on the 30th, when a stop of 50 brls. was made. The schooner *Sea Foam* arrived on July 13, with 43 brls. from the Cape Shore, where schools of herring were reported. One barrel per net was taken on August 5 and nothing afterwards.

Lobster season opened with poor catches and with very little change throughout the season. The four factories are reported to have packed 3,750 cases.

Mackerel first appeared on May 16, and on the 29th were reported schooling off Seal Island. Mackerel traps had 200 fish and netters 12 to a boat on June 19, and on July 1, 500 were reported in traps. The catch, this season although a little better than last year, has been considered a poor one.

## SAND POINT.

Reporter : Mr. John A. R. Morrison.

Alewives were not reported regularly this season, but about 125 brls. were taken in Shelburne river; the greater portion of which was salted for market, the balance being used fresh for bait.

Cod were reported showing on May 1, in good catches and poor after throughout the month to the 29th and 30th, when good fishing was again reported. Cod appeared in good numbers June 1, and from the 6th to 16th the fishing was fairly good, with boats averaging 2 qtls. From the 18th to the last of the month, from good to fair hauls were made. The schooners *Mistrel* and *Kestrel* arrived on the 24th from the western



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bank, with 800 and 700 qtls. of cod respectively. Dogfish put in an appearance the early part of July, and as the fishermen found it very difficult to secure bait of any description, the operations of the inshore fishery were practically suspended, until August 6 and 10, when fair reports were received. Cod were scarce after to the 21st; fair to the 24th; poor again to 28th and fair afterwards to the 30th. The *Will Carleton* of Barrington, arrived in on the 27th, with 700 qtls. cod and reported fish scarce on the banks. The boat fishing the early part of September was a failure, as nothing of any consequence was caught to the 18th, when for the next three days fair catches were made; with some boats averaging from 3 to 4 qtls. Good fishing was reported on the 28th and 30th and fair from October 3 to 12. On September 7, the following bankers arrived from the western bank, *John Purney* 1,000 qtls.; *Alma* 1,200; *Mistrel*, 1,100; and on September 2, the *Etta Vaughan* with 1,000 qtls. The Bank Querro fleet had good faer this season and landed 12,000 qtls. of cod, which is an increase of 2,000 qtls. over last year's work.

*Haddock* although not reported were fair on June 19 and 20 and also on July 7. The small boats catch totalled this season 600 qtls. of cod, haddock and pollock.

*Herring* were very scarce this season until August 6, when they struck in fair and were reported the same on the 10th and poor after to the 19th. From this date to the end of the month, fair quantities were taken daily excepting the 28th, when herring were reported in good catches, with boats averaging 3 and 4 brls. The herring fishery was very dull in September to the 18th, and for the next three days, fair hauls were made and poor after for the remainder of this season. The total catch this season is estimated at 300 brls.

*Lobster* operations were almost identical with that of last season's, beginning on January 1, and continuing fair to the middle of March. The May catch was also fair; and very few were taken to the close of the season. The large lobsters caught this season were shipped to the Boston market; the smaller ones were disposed of to the factories. Our reporter thinks 'The lobsters are getting less and less each year, and it will be only a matter of a few years, when this valuable inhabitant of our inshore waters shall have become extinct.'

*Mackerel*.—The only report of this fishery received from this station, was on May 25, when mackerel were reported schooling off this coast. This branch of the fishing industry has been very dull, and not over 5 brls. have been taken the whole season, which were salted for market.

*Salmon*, very few were reported during the season.

*Squid* were very scarce the early part of the season, but struck in plentiful about September 21, and on October 8, a sufficient quantity was taken for bait.

*Dogfish* appeared on the coast as usual, this season, and were reported plenty on or about July 1.

## SPRY BAY.

Reporter: *Mr. W. S. Quigley.*

*Cod*.—Small quantities of codfish were taken on May 22 and 23, and on the 25th and 28th good numbers were on the coast with some boats averaging two qtls. The catch from now to the end of June was from very good to poor and the fish now taken was of a very inferior quality. To October 1 codfish were in catches from fair to poor. On October 8 the fishing was reported fair, and good on the 9th and 10th.

*Haddock*.—A few haddock were taken during the week of October 22.

*Halibut*.—Towards the latter part of May some of the fishermen caught a scattering halibut.

*Herring* were first reported on May 28 in fair quantities, when some boats made a stop of six barrels. The fishing continued fair to June 5, after which herring were scarce until June 15 when boats were getting from two to three barrels. Herring were reported to have struck in off this coast on June 19, but as dogfish were now very numerous along our shores, the fish disappeared until August 17, when they made their reappearance, and on the 21st, 22nd and 23rd the herring fishery was fair. Light hauls

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were made after to September 7 when boats reported from two to three barrels. From this date to the 26th the catch was from fair to poor.

*Lobsters* were first reported on May 1 in fair catches, which varied from this poor to the balance of the month. Light and regular catches were reported throughout the month of June.

*Mackerel*.—A few mackerel were on the coast on July 2, and on the 29th of the same month mackerel of a small size were in the schools of Tangier. During the remainder of the season the catches as far as reported were light.

*Squid* were reported plentiful on August 21 and 22, and fair on September 13.

*Dogfish* were numerous this season all along this coast.

## WHITEHEAD.

*Reporter: Mr. J. E. Dillon.*

*Alewives* appeared about May 9, and light catches were taken until June 3. From now to June 19, good to fair catches were made.

*Cod* were first reported on May 16, when some boats had half a quintal. Fair fishing was reported in June, with boats averaging some days from one to three quintals. The catch varied from fair to poor after until the 3rd of September, when good fishing was reported. Fair catches were taken from the 4th to the 6th of this month, and from the latter date until the 27th of September, very few cod were caught owing to the severity of the weather. The cod fishery varied from fair to poor after to the close of the season, which is considered better than last year by 500 quintals, the catch being 3,500 quintals.

*Haddock* fishing commenced about May 9 in light catches, and on the 25th from 100 to 900 lbs. were taken. They were reported fair on June 1, but poor after, owing to a scarcity of bait and the troublesome dogfish, until the 23rd, 26th and 27th of July, when boats averaged from one to two and a-half quintals of cod and haddock, from squid obtained at Queensport. Boats did fairly well on July 30 in this fishery, and the fishermen say that the fares on this coast, both in cod and haddock, would have been largely augmented, if bait could be obtainable at the proper time. Squid appeared in September very plentifully, and on the 12th netters had from 100 to 200 lbs. cod and haddock mixed. Owing to rough weather later in the season, the boats had little chance to go to the fisheries. The season's catch is estimated about 500 quintals.

*Herring* were very scarce the early part of the season, and the first report of any consequence was received on June 16, when herring were reported to have struck in off this coast. Six days later the fishing became very good, and a large quantity of small herring was taken by netters and in traps. Fair catches were made the first week in July, and scarce after to the end of the month. In August several small catches were taken by netters off shore in deep water, but the inshore fishery was very poor. Herring were reported schooling off Fort Felix on the 19th, and fair reports were received on the 5th and 13th of September, afterwards becoming poor to the close of the season.

*Lobsters*.—Fair catches of lobsters were reported on May 1, and to the end of the month from good to poor quantities were taken. The catches in June were reported very light, and the season's pack is estimated about 2,300 cases, or a decrease of 700 cases as compared with last year's catch.

*Mackerel* first appeared on May 16th, and very light catches were made to the 25th, when boats had from 30 to 100 mackerel. On Monday 27, 6,000 were reported in traps, and from 100 to 700 were taken per boat. Three Lunenburg bankers baited here to-day, and on the 1st of June boats averaged half a barrel. Twenty barrels were reported in traps on June 11, and from this date to the close of the season very few mackerel were taken. Season's catch is estimated at 200 barrels.

*Squid* was first reported August 29, and continued plenty to the close of the season.

*Pollock* were not reported regularly, but on the 5th of June 15 quintals were taken in traps. On October 2, some boats had from one to two hundredweight of pollock.



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*Dogfish* put in an appearance on June 28, and continued throughout the season very troublesome and destructive.

## YARMOUTH.

Reporter : F. L. Hatfield.

*Alewives*.—Light catches of alewives were taken on May 10, but on the 15th the run was fair, and on the 30th of same month fair fishing was again reported. Although not reported later, the catch this season was considered very good.

*Cod* appeared about May 14, and the catches to the end of the month were on an average fair. Very good fishing was reported on the 6th and 11th of June, and fair after to the 25th of July, when very good hauls were made. To the close of the season codfish were fairly plenty, although heavy winds deterred the fishing considerably.

*Haddock*.—Light quantities of haddock were taken in May, from the 10th to the 11th of June, when very good catches were made. Fair fishing was reported after to the 18th of July, and during the last part of autumn the haddock fishery was very good.

*Halibut* season commenced previous to the opening of the bureau in May, and light catches were taken to the 10th of May, but on the 14th the fishing was fair and afterwards light again to the end of the month. Very good fares were reported on the 6th and 11th of June, with fair reports on the 17th and 21st. Small catches were taken to the last of August. The catch is considered not as large as last season, but it cannot be expected that any season will equal the preceding one. All other things being equal, the practical eye can see, but the powers that be will continue, no doubt, hence the scarcity.

*Herring* were first reported on June 25, when a few appeared on the coast. Nothing was afterwards reported until the 18th of July, when light quantities were taken. Dogfish were now plenty on our shores, and herring became scarce after until the 7th of August, when they were reported off Tusket islands. The early run of herring was about the same as last year, but the fall fishery was poor in comparison to that of 1900.

*Lobsters* were first reported in light quantities on May 8, but from the 10th to the end of May, lobsters were taken in catches varying from fair to poor. The catch this season showed a marked decrease as compared to last year, although this fishery required the services of nearly three times the men and gear to procure it.

*Mackerel* were first reported this season, when a catch was made by the Iron Mine trap, on May 9, and from now to the 31st of the month, traps averaged from 1 to 5 ice

barrels. Small catches were taken the first week of June, but on the 11th mackerel traps reported for the past two days, fishing a catch of from 5 to 35 ice barrels of medium size fish. Very small catches were taken after to the 25th of the month, and fall of run of mackerel was reported about this district. Mackerel made a poor showing inshore this season, while offshore there were reports of larger fares than last year, which the American seiners reports seem to prove. The old time theory of dirty bait, lobster gear, &c., may yet prove true—that mackerel being a clean fish will not come near the shores where there are any filthy obstructions.

*Salmon* first appeared fair on May 10, and poor after to June 6 and 10, when very good fishing was reported. Light quantities were taken afterwards to the close of the month.

*Trout*.—Good catches of trout were reported on May 8, and fair on the 10th.

*Shad*.—Light quantities were taken in May and June.

*Smelts and Eels* have been an unknown thing this fall, except for private parties to retail in small quantities.

## FACTORIES.

Mr. Hatfield says :—‘ The lobster factories, I think have one or two less in number this year than last, although the quantity packed is nearly the same, but as I said

before it cost more to get the lobsters as well as to watch them, and the general impression is that the majority of the factories can everything in the crustacean line from one inch up and with a poor foreign market price, the season's yield on the whole has not been as remunerative as last year. Our reporter further says, it is evident that the 10½ inch size will have to be adhered to in order that the lobsters may be saved.

## CAPE BRETON.

### ARICHAT.

*Reporter : Mr. J. T. Jean.*

*Cod*.—The fishing season in general opened very late this season on account of the continual easterly winds, and cod first appeared about May 27, fair. The catch during June, July and August varied from fair to poor, but larger hauls would have been made had bait been obtainable, as on several occasions the fish were reported plenty, off the harbour, but there was a marked absence of the thing needful—bait. A slight change for the better was noticed in September, when cod appeared in fair regular quantities throughout the month, attributed to the fair visits of that little bait-fish squid during the previous month. The codfishery on the whole was very good this season, but the only drawback to our fishermen is the scarcity of bait in the summer months, when there is a plentitude of fish. This will be remedied, however, as will be seen further on in this report.

*Haddock* struck in on May 8, when a small catch of from 10 to 30 per boat was taken, and from fair to poor for the balance of the month. On May 22 some boats netted 30, 40 and 100 haddock, afterwards becoming scarce for the remainder of the season. The spring run was late and the catch this season is estimated as being small.

*Herring* were reported as showing first, on June 12, when 50 barrels of small herring were taken by the fishermen with seines. Fair takes were made on June 24 and 29, and during the first week in July some very good fares were taken, with few boats averaging 10 barrels. Owing to stormy weather later in the season, the boats were forced to return to the harbour from their jnets. Altogether the catch was a poor one this season.

*Lobster* fishing began rather late this season and lobsters were first reported fair on May 7, which continued so for a few days only, and afterwards poor to the close of the lobster season. During the fishing season, some of the fishermen did fairly well; others practically nothing.

*Mackerel* were reported as having struck in on May 22, and very few were caught up to September 19, when schools of small mackerel were reported in the harbour. A few were taken by hooks on September 23 and 24, but none afterward. The catch of mackerel was as usual a complete failure.

*Squid* were reported striking in on August 28, and for next three days were reported fair. A sufficient quantity of squid for hand lines was taken on September 4. It is understood that a bait freezer has been erected by the government at Petit de Grat, about three miles from here, which will prove beyond a doubt, very beneficial to the requirements of the fishing industry at that place and the neighbouring fishing stations.

### WEST ARICHAT.

*Reporter : Mr. C. P. Lelacheur.*

*Alewives* have been very scarce this season at this station and only a few barrels were taken.

*Codfish* were first reported about the last of May and light to fair catches were made during the first week in June, but were scarce the remainder of the month. A few fair catches were made in July, but poor fishing was again reported during August and September. The total catch is the poorest ever known in this place.



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*Herring* appeared on the coast during the latter part of June when a few medium sized fish were taken. Fair catches of good sized fish were reported on the 1st and 2nd of July and again on the 5th and 8th. The fish then moved out into deep water and although good fishing was reported about the 26th and 27th, the catch was confined to a few boats and small crafts which had moved their gear out into mid bay. The total catch is very poor and does not average more than five barrels per boat.

*Haddock*.—Few haddock were reported on June 5, but this branch of the fishing industry has been a failure this season.

*Lobsters*.—Although the season for catching lobsters opened early on April 15 and having no drift ice to impede the progress of the work the catch this season is the smallest ever known at this station. It is true that the fishing to a great extent was overdone, as too many fishermen had gone into the business; nevertheless, the quantity taken was far below that of any previous year. Every effort was put forth to catch the fish, and traps were set miles off shore on fishing grounds hitherto unexplored, but all in vain for no better results were experienced.

*Mackerel* were a complete failure this season. Several schools were seen about September 1, but they would not take the hook.

On the whole the fishing at this station has been very poor this season and may be classed as the worst ever known here. As a result the majority of our fishermen were forced to abandon the work early in August and seek some other employment.

## CHETICAMP.

*Reporter: Mr. Chas. E. Aucoin.*

*Cod*.—The fisheries in general of this locality including the fishing stations Cheticamp proper and Island Grand Etang, Cape Rouge and Pleasant Bay, have been moderately successful not so much regarding quantity as the quality of the fish. An exception must be made, however, of the mackerel fishery, which has been a total failure. The quality of the staple fishes, especially the cod has been an exceptional one. Our reporter says:—'That I am glad to report that never in my lifetime have I set my eyes on such monster fishes as I have this season.'

Cod were first reported on our shores on May 1 in good catches and from this date to the end of the month the inshore fishery was from fair to poor. It was reported on May 11, that owing to a delay in the fitting out of vessels, the fishermen could not avail themselves of the first schooling of cod offshore. The schooner *St. Helier* arrived in on May 27, with 1,800 lbs. of fine cod, and about this time cod began to increase in numbers, which continued to the first week in June, when good catches were reported on the 1st, 3rd and 7th. It was noticed, however, that the recent school of cod that struck the shores was of a poor quality. Fair catches were made on the 11th, 12th, 19th, 20th and 21st, and good from June 24 to 29. The staple fishes were somewhat poor the first week in July and the finest catch of cod our reporter ever saw was taken on July 9. Among one haul were 12 monster cod. Four of them were weighed and tipped the scales at 220 lbs. That same haul contained no less than 1,800 lbs. A scarcity of bait a few days later accounts for the slackness of the fisheries. Squid, the potency as it were, in the catch of cod only 'smelled' this shore in passing by. August 5, 6 and 7 were exceptional days in codfishing, and one boat among others secured a haul of 2,700 lbs. on the 6th, the quality of which cannot be excelled. Cod now keeps offshore and boats have to go some 15 or 20 miles off land and sometimes are compelled to remain there over night. Fair hauls were reported in September on the 5th and good on the 4th, 6th and 13th, and fair again on October 12. The uncertainty of the weather is now the only actual hindrance to successful fishing. Two days per week is the average time of bad weather where fishing crafts will not venture out on the far off lands.

*Haddock* were first reported on our shores about May 1 in fair quantities, and the catches throughout the season were almost identical to that of the codfishery.

*Hake* as of haddock, the same can be said of the hake industry in regards to the catches, particularly so from July to the close of the season.

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*Herring*.—The only report of herring received was on May 2, when they were in fair catches and it appears that herring have entirely left our shores.

*Lobsters* were reported very good on May 1, when one boat had 250, and the fishing varied from this condition to fair until the 14th, when lobsters were again reported very plenty to the 20th. From this date to the end of the month good catches were made. Lobsters continued good in catches the first week in June, but the second week saw a slight decrease both in quality as well as quantity. The fishery continues so poorly that on the 29th several trappers hauled their traps, gear, &c., to the shore. Fair fishing was reported on July 8; good the following day, and as the season advances lobsters are getting poorer. The operations of this industry ceased about July 13. Lobsters were reported, on May 21, very plentiful at Cape Rouge. The catch on the whole has been considered a very good one. The good success of the first half of the season largely compensates for what it lacked towards the end.

*Halibut* were reported the first rather earlier than last year and fair quantities were taken on July 26. During the month of August an occasional halibut was hauled.

*Mackerel* were first reported on June 25, when a few were caught in nets, and very scarce until about August 3, when the fish were reported schooling, but not hooking well. The off shore fishery reported mackerel in schools on August 10, but did not seem desirous of taking the hook. September 7, saw this fish for the first hooking, and the same was reported at Cape Rouge. The catch this season has been considered a total failure.

*Salmon*.—Netters began operations on May 31, with good catches, but during the week the fishing suffered considerably owing to the disagreeable weather. Fair catches were made on June 1 and 3, both on the mainland and island, and salmon played badly until the 27th, when fair hauls were again made. The catch varied from good to fair from July 1 to 13, and poor after to the end of the month. Mr. Aucoin says on July 6, 'that it has been reported to me that the pools in Little river are quite empty of salmon, a thing very unusual at this season of the year. As quiet is absolutely necessary at those pools during the spawning time, I don't see why the millionaire angler is let to do any business there.' It is asserted that salmon will leave the pools as soon as those pernicious anglers commence their work. A few salmon were taken in August, and this fishery has been far better protected this season than usual.

*Squid* struck in along our shores on June 27, 28 and 29, in good quantities, and there was quite a rejoicing among the fishermen over their arrival. Seldom in the history of the fishermen has this little fish struck in here so early. The thing was of rare occurrence. A sudden revival in cod, hake and haddock is now looked for. From very good to poor catches were made in July, and from very good to fair in August, which is accounted for by the very dry weather now prevalent. Squid continued to play well in September, with good catches on the 4th and 13th, and very good on the 6th. In October on the 12th they were plenty, and scarce afterwards to the close of the season.

*Trout* were reported in May, but of an inferior quality, and in June were not accounted very bad when a little boy, the week of the 3rd, caught 24 fish in an hour. A fair supply was taken during the remainder of the season.

*Eels*.—On August 3, eels were reported very plenty and it was not very unusual to catch from 60 to 100 in a single night. They were caught around the wharfs and mackerel jigs were used.

Statistical report of the fisheries of Cheticamp and adjoining districts for the year of 1901.

The following has been received from the merchants themselves :

## EASTERN HARBOUR.

Codfish .....	5,498 qtls.	Lobsters .....	14,592 lbs.
Herring .....	120 brls.	Salmon .....	10,889 "
Haddock .....	73 qtls.	Pollock .....	25 qtls.
Hake .....	5 "	Cod oil .....	500 galls.



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## GRAND ETANG.

Cod.....	903 qtls.	Salmon .....	5,000 lbs.
Haddock.....	78 "	Lobsters .....	24,984 "
Pollock.....	18 "	Cod oil.....	930 galls.
Mackerel .....	13 brls.	Dog oil.....	250 "

## CAPE ROUGE.

Lobsters..... 15,024 lbs.

Summing up the production for the past season, of the different stations of this district, it would give a total of :

Codfish.....	6,401 qtls.
Herring .....	120 brls.
Mackerel.....	13 "
Lobsters.....	54,600 lbs.
Haddock.....	151 qtls.

About 250 quintals of cod, hake and haddock were shipped by the fishermen, and 160 quintals were sold for local consumption.

## DESCOUSSE.

Reporter : *Mr. John P. Gruchy.*

*Cod and Haddock.*—These branches were not operated this season to any extent, as the fishing in these lines was very dull and only light fares were made. The fish were reported, however, fair on June 27 and 28, but they struck in the early part of June in light quantities. From October 1 to 15 there were only two days during which the boats could venture forth on the fishing grounds, owing to rough and foggy weather, consequently very little fish was taken. It has been said that cod and haddock were never known to be so scarce on our shores as this season.

*Alewives.*—A few were reported on June 22 and 29.

*Herring* struck in about the middle of June, and from now to the end of the month fair and regular catches were made. On the 22nd, boats averaged from 1 to 2 barrels of herring, with good prospects. Very good fishing was reported the first week in July and several days later this run of fish was over. A few were taken the latter part of the week of August 5, and about the 24th of the same month, herring of a poor quality were taken in nets. The fall fishing only lasted two or three nights, during which herring were reported plenty.

*Lobsters* were first reported on May 2, fair, and continued so to the middle of the month, and scarce afterwards to the close of the season. The fishing on June 1 was so greatly hampered by easterly winds and heavy seas, that during the following week many fishermen engaged in this industry landed all their traps, gear, &c. The catch this season was very poor as compared to previous years.

*Mackerel* appeared the first week in June, and on the 8th, a small stop was made, but the spring run is now considered over, very few of which touch this coast. Mackerel were reported fair on July 2, and a few days later about 1 barrel was taken to a boat. On August 3, a few were caught with nets and hooks, and during the last week of the month mackerel were reported hooking freely. In St. Peter's bay, on the 30th, the fish were schooling, and the following day, boats averaged from 200 to 300 mackerel. They were again reported hooking freely and schooling in the same locality from September 2 to 19, and scarce afterwards until October 15, when a small haul was made in nets offshore.

*Squid* were very much in evidence during July and September, and again on October 15, when they were very destructive on mackerel in nets.

*Dogfish* were on our coast this season and were very destructive to nets and fish on August 17, and were plenty on September 21, greatly impeding the herring fishery and destroying the nets.

The season's catch at this station is considered a very poor one, as there has been a gradual decline in the catches of all kinds of fish.

## GABARUS.

*Reporter: Mr. James Nicholl.*

*Cod.*—Were first reported on May 8, and on the 10th and 11th light hauls were made. The fishery was fair from May 24 to May 29, and in June the catches varied from good to poor to the close of the month. On the 3rd and 15th ult., 300 pounds and 9,000 pounds of codfish were taken respectively. Good catches of cod were reported during the months of July and August, which continued to September 11. Nothing was afterwards reported.

*Herring.*—First struck in on May 7, with boats reporting 700 herring. Light quantities were taken after to July 6, when for the next four days the herring fishery was fair, and some boats had 800 and 1,000 herring. From now to the end of August the fishing varied from good to poor.

*Lobsters.*—A few lobsters were caught May 4, but the first report received on the 7th, indicated that lobsters were fair, which improved to good and varied from this condition to poor to the end of the month. The June catch was from good to poor, and that of July from fair to poor. On June 3, 10,000 were reported to have been taken.

*Mackerel.*—Season very favourably on June 1 and 2, in good catches, with boats averaging 500 mackerel for two day's fishing, four miles off from head lands. Seven hundred mackerel were stopped on June 15, and small catches were made after to July 11, when mackerel were reported plenty and schooling in the bay. Light catches of mackerel were reported on August 20, 23, and 26.

*Squid.*—Were reported fair on June 13 and plenty the following day. Good catches of squid were made on July 20, August 26, and from September 3 to 7. It was reported that 5,000 squid were taken on June 15.

## INGONISH.

*Reporter: Mr. J. M. Burke.*

All branches of the fishing industry had an early opening this season.

*Cod.*—Fishing commenced the first week in May, but owing to rough weather, it was not until the 8th or 10th that any codfish were caught worth mentioning, besides, the fishermen were engaged in catching lobsters and haddock which had appeared on the coast early in the season, hence the spring catch of cod was small. During the remainder of the season the catches varied from fair to poor, with best boat reporting 600 pounds on trawls in September from the 16th to 21st. The catch is considered about the same as last year.

*Haddock.*—Appeared early in the season in light quantities, but were first reported on May 7 and were very plenty for three weeks on trawls on certain grounds, and the fishermen engaged in this branch of the fishing industry reaped an abundant harvest.

*Herring.*—Struck in along our coast the last week of April. They were not very plenty and were chiefly salted for lobster bait. There was no summer run of herring this season.

*Lobsters.*—Although lobsters were on our shores it was well into the second week in May before the lobster fishing got properly under way, owing to the stormy weather and a very rough coast the first days of the month. The catch was fairly good the first five weeks but gradually diminished from July 1 to the close of the season. On the whole the catch was a shade better than it was last year, but prices being somewhat lower this season in foreign markets the packers were not benefited by the increased pack.

*Mackerel.*—First appearance noted was between May 15 and 20, when good catches were taken for about a fortnight, boats averaging from five to twenty barrels, according to their outfit of nets and attention paid them. A few summer mackerel were caught in shore-fast nets in July, August and to October 15. The catch is quite in excess of last year, but prices ruled low during the first of the summer.



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*Salmon*.—Appeared about May 20 and were quite plenty all the season. The catch this year is considered double that of last, one-half of which was sold fresh and shipped to various markets.

*Squid*.—Struck in between June 20 and July 1 in fair quantities and were reported plenty up to present date.

*Dogfish*.—Were numerous on this shore this year and greatly retarded successful net fishing and were a source of annoyance to cod fishermen as well, destroying more or less gear, &c.

## L'ARDOISE.

*Reporter : Mr. John McIsaac.*

*Cod*.—The catch of cod inshore this season has been very small, and smaller than for many years. The fish appeared on June 3, fair, and on August 28 and 30, and September 6, fair hauls were again made. During June cod were reported in deep water, and on July 11, the fish offshore was reported fair. On or about this time all large boats were leaving to prosecute the deep-sea fisheries off Scatterie and Lingan, from whence during the first week in August, several crafts arrived, bringing full fares and reporting fish plenty on the grounds. This eastern fishery is the main-stay here, and some large, fine vessels are engaged in this industry, and, it is said, that the people at this station could not really exist, had they to depend chiefly on the inshore fishery.

*Haddock*.—Signs of haddock were observed on May 9, and a day or two later a few were reported on trawls. Light quantities were taken during May, and on August 5, the fish moved out into deep water. Fair fishing was reported on May 30, but few boats attended, as haymaking engaged the attention of the fishermen. The catch is considered a failure.

*Herring*.—A small quantity of herring of a very good quality was reported on June 20. They became scarce after and the next report was on July 11, that some boats were at St. Peter's island, attending this fishery. Very few barrels have been taken to date and not sufficient to supply local demands. On August 15, there was some appearance of herring, and the few fishermen who had their nets set, were obliged to take them in, on account of the abundance of dogfish, which were very troublesome to net fishing. A stop was made on September 12, but not of a large quantity. The fish at this season of the year, is not as good for export trade, as the July and August run, but are sufficiently good for local purposes. The catch has been a poor one.

*Lobsters* were reported on May 2, as having made their appearance on this coast about ten days ago, in fair catches, when bait could be obtained. The catch varied from fair to poor during the month, afterwards becoming poor to the close of the season. This was the only branch of the fisheries that came up to the average this season, and as high prices prevailed, the losses in other lines of the fishing industry were greatly counterbalanced.

*Mackerel* appeared on May 22, when eight or nine were taken for the first, with very light catches after to the close of the season. Scarcely any mackerel were salted for export, the hauls, such as they were, being disposed of to the bankers for bait. The catch this season can be put down as a total failure, as the quantity taken is the smallest ever known at this station, where at one time, the L'Ardoise bay was recognized by the local fishermen, as the only fishing grounds between Canso and Louisbourg.

## LOUISBOURG.

*Reporter : Mr. H. C. V. Levatte.*

*Cod* first appeared about May 11, and were reported in fair catches until the last of the month. The fishing continued fair the first week in June and was poor after, owing to the roughness of the weather, until the 17th, when cod struck in fair again. Good fares were reported on the 20th and fair on the 24th. Dogfish now appeared, and

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all kinds of fish became scarce to July 4, when fair quantities were taken. Light hauls were made during the remainder of the month and a portion of August, and on the 21st of the latter month, boats averaged 5 quintals. From the 23rd to 31st, an average of 3 quintals per boat was taken. In September, on the 2nd, boats did fairly well, and had from 3 to 5 quintals and 2 quintals on the 3rd. The fishery was dull after to the 27th, when from 1 to 4 quintals were taken. The catch of cod this season is below the average.

*Lobster* fishing commenced about May 8. Fair catches were reported during May and June, but the month of July was very blustry, and lobsters were consequently scarce. The catch was not up to the average this season.

*Mackerel* were first taken on May 22, and on the 25th, boats averaged 200 fish. Good catches were made on the 29th and on June 1. Very few were reported after until the 17th, when boats averaged a catch of 1,000 fish mixed, herring and mackerel. Fair catches were made on June 22 and poor afterwards until the month of August, when quite a quantity was caught by hooks and in nets. On September 27, 100 mackerel were taken, the first for three weeks. No fall mackerel were taken in nets, and the catch this season is considered above the average.

*Herring* struck the coast about June 17, when they were taken in catches with mackerel. A few were caught early in July, and fair stops were made on July 13 and 18. The herring nets could not be left out on account of dogfish, which were very destructive and troublesome. The catch is below the average.

*Dogfish* appeared on the coast about June 30, and were in large quantities on July 10. A wholesale destruction of nets by this avaricious fish was reported on July 24. The fishing was also greatly hindered the following week by their presence. Mr. Levatte considers this fish a great plague on our coast.

## MABOU.

*Reporter : Mr. Lewis McKeen.*

*Alewives* appeared early in May, and the catch during the season was very light, which was used chiefly for lobster bait.

*Cod* appeared in light catch on May 2, and afterwards were fairly plentiful, but as bait became scarce and nearly all the fishermen were engaged in lobster fishing, very little attention was paid to line fishing. During July a few fair catches of codfish were made, and between August 10 and September 4, good hauls were taken whenever the weather permitted. After the latter date the fishing was irregular, owing to the presence of dogfish on our shores.

*Haddock*.—Light catches of haddock were reported at this station from May 25 to June 24, when a few irregular fair catches were made to the end of the month. From now to September 13, haddock were taken in catches varying from fair to poor.

*Hake*.—Small catches were taken from July 11 to 21, and poor after until August 6, when, for the next four days, fair fishing was reported. Good catches of hake were made between August 10 and September 4, when the weather was favourable. Dogfish were now plenty and destroyed the line fishing to a certain extent.

*Herring*.—The first catch of herring was made on April 24, and during the next two weeks the catches were fair, afterwards becoming very light. The July run of herring was also light; in fact, the summer catch has been poor during the past three or four years. The fall catch of herring was likewise light, and, on the whole, this fishery has been a failure along this coast during the past season.

*Lobsters* appeared several days earlier this year than last, the first catch having been made about April 24. Good catches of large lobsters were made during fine weather to May 15, and to the close of the month and up to June 15, the catches varied from good to fair. About June 15 a large quantity of traps and gear, &c., was destroyed by heavy storms. The catches of lobsters during the remainder of the season was very light, which was partly owing to the scarcity of good bait-food. The total catch was on an average good.

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*Mackerel* appeared early in July, but although large and plentiful on the coast up to August 20, the catch was poor and irregular. After August 20 very few mackerel were reported on our shores. The fishermen attributed the light catch of mackerel to the fact that the fish did not take the hook freely and not to the scarcity of fish.

*Salmon* appeared in the month of June, somewhat later than usual. The fish were large and the catch was a little above the average. The catch of salmon, however, of late years has not been large in this locality.

## MARGAREE.

*Reporter : Mr. M. A. Dunn.*

*Alewives* struck on the coast about May 1, but only light catches were reported to the 15th, when they appeared plentifully and good fishing continued in the river for some days. After this the catch varied from fair to poor, with the exception of a few days in June, when the run was about completed.

*Cod*.—The first cod caught this season was about May 1, in light catches up to June 20, when good hauls were made, which varied from this to fair until August 20. From now to September 20, light fares were generally reported with the exception of a few days about August 10, when cod were reported plenty. After September 20, to the end of the season the catch was very small, owing to very bad weather on the fishing grounds, which greatly interrupted all kinds of fishing. The season's catch is considered about an average one.

*Haddock*.—The first haddock of the season was taken about May 1, and only a few were taken to the end of May. From this date to June 20, the catch was fair and for the remainder of the season haddock were taken in quantities varying from fair to poor. The total catch was about an average one.

*Hake*.—Few were taken along this coast from early in June to the end of the season. The whole catch of hake for this season is reported small.

*Herring* struck in about April 22, and a few fair stops were made. After this until May 15, only small fares were reported. Nothing was done for the remainder of the season, and the catch has been considered almost a total failure.

*Lobster* fishing commenced the last week in April, but only light catches were reported until about May 8, and from now to June 20 the catches were generally good. The catch for the remainder of the season was light, and the season's pack is estimated below the average. A considerable portion of lobster gear, &c., was rendered useless by the heavy storms, gales, &c., which prevailed from the 13th to 19th of October.

*Mackerel*.—A few small mackerel were taken early in July, and on the 6th about 200 per boat were reported. Large quantities of mackerel were on the coast on July 9, but were reported not hooking well. The mackerel situation was very quiet afterwards and the catch for the season was almost nil.

*Salmon* first appeared on the coast June 1 in light quantities until the 20th, and after to July 15, heavy takes were made. During the remainder of the season the catch varied from fair to poor. The total catch is reported about 20 per cent in advance of last season, which was considered an average one.

*Squid* appeared about July 15, and were reported good on the 29th and fair on the 31st of the same month, continuing from good to poor to the end of the season.

*Dogfish* very much retarded the operations of the fish industry during the months of September and October, in which time they were reported plentiful.

## MEAT COVE.

*Reporter : Mr. A. B. McDonald.*

*Cod* were very scarce the early part of the season and the first favourable reports were received on June 26, when good fishing was reported and fair the following two days. The fishing was again reported fair in July on the 3rd, 16th, 17th, 29th and



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31st, with poor catches intervening owing to strong westerly breezes. The August catch varied from good to poor and from good to fair catches were made between the 6th and 18th of September. Nothing was done in the fisheries of any importance to the close of the season.

*Herring*.—Light catches of herring were made early in the season until about May 1, when they appeared in great quantities with nets averaging 200 herring. Poor catches were reported after to the 19th and 20th of June, when fair hauls were made and again fair on the 25th, 26th and 27th. Herring were taken in fair quantities on July 3 and poor after for the balance of the season.

*Lobsters* were taken in fair quantities on May 6, but increased to plenty on the 13th, 14th and 15th and very plenty on the 16th and 17th. Heavy seas on the 20th damaged the lobster gear and fair takes were reported on the 21st. The following day very good results were obtained and from the 27th to the end of the month fair fishing attracted the attention of the lobster fishermen. The June fishing opened fair, which improved to good and after fair again to the close of the season. Heavy north breezes damaged lobster gear very considerably on the 13th and again on the 16th of June.

*Mackerel* were first reported along this coast this season, fair, on July 27. From good to poor catches were reported in August with boats averaging on the 24th from 200 to 300. Mackerel were reported hooking freely at Bay St. Lawrence, Aspy Bay and Cape North on the 22nd and 23rd of August.

*Salmon* were reported fair on May 29 and from fair to poor the following day. The June catch varied from good to poor. On June 13 the nets were badly damaged by heavy north breezes.

*Squid* were first reported fair on August 29, and were taken in catches varying from good to poor from September 6 to 18.

## PETIT DE GRAT.

*Reporter : Mr. P. T. Fougere.*

*Alewires* were scarce on this coast this season and what was caught here was taken in catches with herring and mackerel. The season's catch was about 14 barrels, which sold for \$3 per barrel.

*Cod*.—Light catches of cod were first reported on May 6, and remained so to the 25th and 27th, when good quantities were taken. Fair catches were made on June 1 and good fares would have been reported if bait could be procured. There was such a scarcity of the latter commodity on June 10 that fishermen were compelled to dig clams. The fishing was reported fair from the 11th to 22nd and during the week of the 17th, the schooner *Vanguard*, from Magdalen island, arrived in with 130 barrels of mackerel and 6,000 lbs. of cod, and schooner *J. B. M.* with 30 barrels mackerel and 9,000 lbs. cod. The weather was so stormy and disagreeable after that the fishermen could not go to the grounds. Small quantities were taken in July and August, excepting the last week of the latter month, when fair fishing was reported on the outer grounds. In September codfish were poor inshore, but fair hauls were made off shore from the 4th to the 7th and on the 21st. Stormy weather set in again rendering the fishery dull to the close of the season. The catch this season is about 50 per cent of last year's and will not exceed 1,000 quintals. The quantity taken was sold, and realized \$4 per quintal.

*Haddock* were first reported fair on May 11, in nets made purposely to catch them, and light quantities were taken after to the 27th, when the fishing was fair, which continued to June 12. Small fares were taken for the remainder of the season to October 12, when haddock were reported fair. Very few of these fish were taken on trawl. About 850 quintals were dried and disposed of to the different merchants at this station, at \$3 per quintal. The catch was below that of last season by 500 quintals.

*Herring* were first reported, when sufficient was taken for bait, on May 18, and one week later, on the 25th, herring were fair and boats made large stops. A few were taken afterwards to the 18th, 19th and 20th of June, when fair catches were made and



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poor until July 3, when herring struck in fair supply. From this date to September 11, the fishery was poor, and on the following day herring were plenty with boats averaging 25 barrels in one night's fishing. On July 27, after 30 days out there arrived the schooner *J. B. M.* from the Magdalens, with only 10 barrels mackerel and 10 barrels herring, reporting fish scarce and weather very severe. Herring were taken in small catch for the balance of the season. These scale fish must be taking another coarse, for, since the past three years they seem to be abandoning this coast. Last year over 1,200 barrels were taken, and the previous season about 2,000 barrels, and for the present year 600 barrels will represent the total catch. It is contended by some of the fishermen that the baiting of the lobster traps has something to do with the fish departing from our shores. Decayed animal matter is allowed to remain in the traps for a longer time than necessary and the water in the close vicinity of the lobster gear becoming stagnant is the chief cause of herring being a stranger all along our shores, where lobster fishing is carried on. Although scarce this season herring paid well, and found a ready market at \$5 per barrel.

*Lobsters.*—Owing to the easterly winds and drift ice in the bay the lobster season did not open until April 15. On May 1, lobsters were reported in fair catches, which varied from this to poor to the 27th. For the next four days, the weather was very stormy with the wind eastward and the lobster fishermen suffered severely. The month of June opened favourably in fair catches, which remained so to the 22nd, afterwards becoming poor to the close of the season. Lobsters have not been so numerous this season as last. One firm put up 400 cases, which was considerably less than in former seasons and exported to the United States 50 crates, containing 140 lbs. each. The price paid the fishermen was \$3 per cwt.

*Mackerel* made its first appearance, when twenty were taken by the fishermen on May 25, and scarce afterwards until June 20, when fair catches were made. During the week of the 17th the schooners *Vanguard* and *J. B. M.* arrived in port from the Magdalens islands with catches of 130 and 30 barrels of mackerel respectively. Light fares were taken to July 25, 26 and 27, when good catches of small fish were reported. On the 27th the *J. B. M.* landed 10 barrels of mackerel and on August 1 and 6, fair stops were made. This fishery was poor after to September 20, when mackerel were reported schooling off this station. The season's catch is estimated at 10 barrels, which is practically nothing to what this fishing was in the past. About 300 barrels were landed here, from the Magdalens by one of our fishing vessels, and only two of our crafts prosecuted this industry this season owing to a falling off in the prices in previous years. The prices paid for mackerel this season ranges from \$4, \$6, \$8 and \$12 per barrel.

*Pollock*—This fish has also the appearance of leaving our fishing grounds. Something like 1,000 quintals were sold in 1900, and this season only 250 quintals were taken. The price paid was \$2.50 per quintal.

*Oil.*—The oil obtained by the different firms from the fishermen, was 22 casks, containing 44 gallons, which would make a yield of 968 galls., or a decrease from last year.

*Salmon.*—Fair catches of salmon were reported on June 12, 19 and 20 and light after to July 20.

*Squid* were first reported on August 9. Very abundant and fair catches were taken on the 12th, 23rd and 31st. In September squid were taken in catches varying from good to poor. Light quantities were secured from October 7 to 9; good on the 10th and fair on the 12th.

*Dogfish* were plentiful and very destructive in the months of July and August.

*New Industry.*

Our reporter, in submitting his report to the bureau says: "Although it is now rather late in the season, the fisheries are still prosecuted with much vigour, and the catches are considerable from day to day. In 1900, 4 small vessels of ten tons burthen, commenced fresh fishing as it is called about November 20, and continued till January 15, with good results. Now there are ten vessels engaged in this industry and a good quantity of codfish and haddock are being captured. Although the prices at present are

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low, the quality of the fish caught will bring its actual value later in the season. Last year only one firm purchased these fish, and experienced a great deal of trouble in forwarding them to the markets, as they had to be carried by teams a distance four miles and thence by the railway to their destination. This season this difficulty has been obviated by the inauguration of the ss. *Percy Cann* which runs daily to Port Mulgrave with these fish. Another firm has also been established here and is making the finnan haddie industry one of its chief products. They shipped extensively to the upper provinces. About December 1 this new firm bought 50,000 lbs. of fresh fish, which was forwarded to the smoking house, where twelve hands at great expense are engaged to prepare them, after which they are already for shipment. The old establishment since November 1, purchased 235,000 lbs. of fresh haddock, which underwent the same treatment, preparatory to being exported to the various markets."

## PORT HOOD.

*Reporter: Mr. E. D. Tremaine.*

*Cod*, although not reported, were caught first this season in fair quantities on May 16, a week earlier than last year. They continued in catch from fair to poor during May, June, July, August and the early part of September. On the 13th of September dogfish appeared in large numbers, after which the fishing could not be profitably prosecuted until such time as this voracious fish had disappeared from our shores.

*Haddock* struck in the second week in May and were fair to plenty for a short duration, afterwards varying from fair to poor until the arrival of the dogfish in September.

*Hake* first appeared about June 19 in fair quantities and remained so for the balance of the month, excepting from the 25th to the 27th inclusive when good hauls were made. The catches for the remainder of the season were fair with an occasional poor one, caused by the destructive dogfish.

*Herring*, as usual, for the spring, was on an average fair in May. A few were reported on June 25 and 26, and a small stop of summer herring was made the first part of July. Nothing was done in this line in August, but fair catches were reported on September 4, 5, 6 and 7, and dull afterwards for the balance of the season.

*Lobster* season opened the last week in April in good catches, which varied from this condition to fair throughout May and early in June, afterwards falling off to poor until the close of the season, which is considered a good one.

*Mackerel* were taken in fair numbers for a short period the last of June. The mackerel caught were large but not fat. Only occasional catches were reported afterwards, and the catch this season is considered a poor one—about the same as last year.

*Squid*.—A few were reported during the season.

*Dogfish*.—This coast this season has been swarmed with a plentitude of the destructive dogfish, which has expressed itself very aggressively. They struck in about September 13 in large numbers and practically took possession of all the fishing grounds, and were still reported very active, making profitable fishing unfavourable.

## ST. ANN'S (ENGLISH TOWN).

*Reporter: Mr. Thomas D. Morrison.*

*Cod*.—A few cod were reported on May 9 for the first and light hauls were afterwards taken to June 15, when they were reported plenty. Fair catches were made on June 18, 20 and 21, and again on July 4. As far as reported, nothing was done in this line of the fishing industry to the close of the season.

*Herring*.—The bay being clear of ice on April 23, fair catches of herring were made from now to the last of the month. From May 1 to 6 nets averaged two barrels of herring, and the traps set on May 6 were averaging forty barrels daily until the 10th.

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The catches afterwards diminished and herring were very scarce the latter part of May. The scarcity of herring so early is due, so the old fishermen say, to the heavy rains. A few herring were reported in the nets on July 11.

*Lobsters.*—The heavy seas on the coast prevented the lobster fishermen from setting their traps earlier in the season, but on May 8 and 9 fair catches of lobsters were reported, which increased to good on the 20th, 23rd and 30th. Fair catches were made the first week in June and also from the 18th to 22nd of the same month. Lobsters were again fair on July 4.

*Mackerel* first struck in plentiful on May 30 and fair on June 1. Few were taken during the month, and on July 2 one trap reported five barrels. A similar catch was made on the 19th, and nothing afterwards.

*Salmon* appeared in fair quantities on June 4, but on the 15th they became plenty and were reported fair again on the 18th and 20th. Light catches were made after to the following month, when on the 3rd, 4th and 15th the salmon fishery was reported fair.

*Squid* were first reported in traps on June 19, and on the 21st a fair supply was taken. Small quantities were secured until July 10 when this little fish struck in plentiful, and on the next day seven barrels were reported in traps.

*Pollock* appeared on the coast on May 27, when seven quintals were taken in traps. On June 3 a catch of six quintals were reported by traps. Good fares of pollock were taken on June 21.

## ST. PETER'S.

*Reporter: Mr. H. D. Urquhart.*

*Cod and Haddock.*—The operations in these lines of the fisheries were entirely suspended this season, as no reports of either cod or haddock were received. It was reported that none were taken in the bay, during the entire season.

*Herring* were reported as having struck in the month of June in light quantities, but it was in July that good stops of herring were made and the fishermen did fairly well. On August 8, the fishery was reported good and towards the last of the same month, a run of herring, that was reported in several inlets along the coast, did not appear in this bay. The catch this season was considered good and some of the fishermen estimated their catch as high as 30 barrels.

*Lobster* operations began about April 10, very satisfactory, and some excellent catches were made the first two or three weeks; but after this came heavy and severe storms which rendered the catch per boat very light to the close of the season. The number of fishermen engaged in this industry have not decreased this season and the more intelligent and better informed of them maintain that lobsters did not show any signs of decreasing.

*Mackerel.*—First appeared about May 26 offshore. In St. Peter's bay not over one barrel was taken. The mackerel of the first run of 1899 were of unusual size. Since then they appear to be decreasing. The fish of this year's first run were smaller than those of 1900. The second run occurred about June 20, with mackerel and herring appearing together and resulting in a catch of five barrels. Mackerel were reported schooling off Cape Le Rouge on July 24, and about the last of August the third run put in appearance. The fish were in schools and when this is so they mesh but poorly. Those caught were mostly jigged and the catch will represent 25 barrels. Usually quite a quantity has been taken late in the fall (by jig); but this season none were reported.

*Salmon* were not reported during the season, but not above 20 were taken.



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## PRINCE EDWARD ISLAND.

ALBERTON.

*Reporter : Mr. D. Montgomery.*

*Cod* of a very large size were taken in good quantities at Waterford and North Cape from May 20 to the middle of June, and at Kildare, Tignish and this station from June 1 to July 1, when the fish moved off-shore, and fair hauls of small sized cod were made, up to the 1st day of August. After this the fishing slackened until the month of September, during which time cod were fair to plenty alternately for the remainder of the season.

*Haddock* were very scarce throughout the season.

*Hake* were reported from August 7 to the end of the month in fair catches, but they struck in very plenty about September 1, and up to the close of the season good catches were made whenever the weather permitted.

*Herring* were first taken April 20 and were very plenty at this station, from May 1 until June 10. From May 10 to June 15, large catches were reported at Kildare, Tignish, North Cape and Waterford. Very few herring were taken afterwards and the season's catch is considered above the average. On May 31, several crafts sailed for Caraqueet, N.B., where herring were reported plenty.

*Lobsters*.—The lobster season opened as early as April 25 with good prospects, but three weeks later, the catch greatly diminished and after May 15, lobsters were from fair to poor to the close of the season. The traps, gear, &c., were badly injured on June 15 by heavy gales.

*Mackerel* were taken for the first on May 20, and netting of large size fish was very good up to July 1. From now to August 1, good to fair hooking of mackerel of excellent quality was made. On June 20 and 24, large schools were reported at this station. Light catches of fish of large and good quality were made during the latter part of August and also in September.

*Trout*.—The 'speckled beauty' was reported on June 15 plenty.

*Bait* was scarce all through the season.

## BLOOMFIELD OR MIMINEGASH.

*Reporter : Mr. E. D. Kelly.*

*Cod* fishing commenced about June 1 fair, but a few were taken by hand lines the last week in May. Fairly good fishing of large size fish was reported in June, and during the week of the 17th some boats had from 300 and 400, and others from 700 to 800 codfish. The July catch varied from fair to poor with a scarcity of bait. Very good catches were made the early part of August, and afterwards scarce until the last of the week of the 15th of October, when cod were plenty and the fishing was very good.

*Hake* was reported about the 15th of July, and good catches were taken with trawls up to the 19th day of August. Fair catches were reported in September to the 18th. From now to the close of the season, hake were poor owing to the scarcity of bait and the stormy weather.

*Herring* struck in along our shores about April 27, and fair fishing was reported until the 17th of May, and were very scarce during the remainder of the season to the 8th, 9th and 11th of October, when some large catches were made.

*Lobster* season opened up about the 4th of May and was fair throughout the month, and poor to the close of the season. Some boats reported from 200 to 500 lobsters the last week in May, and on the 3rd of June from 200 to 300.

*Mackerel* were first reported in nets on June 5. Good hauls were made from the 10th to the 14th, and fair to the balance of the month. Mackerel were reported hooking freely on the 6th of July, and about 500 or 600 were taken. The following week



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some boats did remarkably well, one boat's catch totalled over 1,700, and others 1,300. At Roseville and Campbellton a stop of from 500 to 600 mackerel was made. On August 6 some boats averaged from 25 to 120 fish, and on the 13th about 360 to a boat. From 50 to 300 per boat were taken on the 19th of August and few following days, and scarce after to the close of the season.

*Squid* were reported fair to the first and last week in August.

## GEORGETOWN.

*Reporter : Mr. Chas. Owen.*

*Cod* struck inshore about May 8, and fair catches were taken to the 30th of June. Herring bait becoming scarce, the fish moved offshore to the banks, and during the middle of July cod fishing was reported fair on Rocky Ridge, Fisherman's and Pidgeon Banks. Dogfish were now so very numerous and destructive to fish and bait on trawls as well as herring in nets, that the fishermen were obliged to remove their fishing gear repeatedly to avoid them.

*Hake* was first reported on July 3, and during the month fair catches were made. In August the fishing was poor, owing to the scarcity of bait. From the 1st to the 5th of September the fishery was reported fair, and one boat landed 800 pounds of cod and hake. After this owing to a continuance of unfavourable weather, the fishing was discontinued.

*Herring* fishing commenced about April 10, and small catches were netted to the 14th of May, when several schools struck inshore and a considerable quantity was secured by the fishermen, which was sold to the bankers and also for lobster bait. Owing to the appearance of ice on the coast, it is supposed that succeeding schools passed up the straits to the southward. From the 20th to the end of the month, netting was poor inshore, the fish having moved off into deep water. Herring were reported plenty on June 1 off Panmure island, and from two to five barrels were netted. This fishery has been a disappointment to many who anticipated the usual catch and had made preparations for a good season's work. Small herring are now numerous in the rivers and bays.

*Lobsters.*—Owing to unfavourable weather along this coast, the fishermen were unable to place their traps earlier in the season, and the fishing did not begin until the 1st of May. The catch from now to the 30th of June was on an average fair, with the fishermen making good wages. From this date to the end of the season, poor catches were made and several factories closed down before the expiration of this fishing season.

*Mackerel.*—The catch of mackerel this season has been small. Netting commenced about the first of July, and the fish were schooling off Panmure island on the 8th and 25th of this month. Very few were reported to have been taken with hook and line, and about 30 barrels are said to be the extent of the season's fishing.

*Squid* were reported plentiful off Eastern Point the last of August, and light quantities were taken in September to the 16th.

*Pollock* is frequently caught along our shores, which is unusual for their appearance in this locality.

*Dogfish* has been plenty and destructive to nets during the season.

## MALPEQUE.

*Reporter : Mr. Jas. M. McNutt.*

*Cod.*—Fair quantities were reported about May 18, and the catch was fairly good for the first of the season. The fall fishing was greatly interfered with by unsettled weather, and not more than one-half the quantity of fish was taken.

*Herring* struck in on May 1 fair, and good catches were reported on the 8th. Nothing was afterwards done in this branch for the remainder of the season. The catch this season was smaller than usual.

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*Lobster* season commenced about three days later this year, the first catch being reported on May 13, from which date to the end of the month the catch was on an average good. The only fishing reported after this, were a few fair catches on June 3 and 6; the weather afterwards becoming stormy to the close of the season. It is reported that the packers have not done as well as usual.

*Mackerel*.—The only catch of this fish reported this season, was on August 2, when a fair haul was made with nets.

## NEW BRUNSWICK.

CARAQUET.

Reporter ; Mrs. E. Blanchard.

*Cod*.—On May 3, preparations were being made for the cod and lobster fisheries, and from the 11th to 25th light catches of cod were taken. Fair fishing was reported on the latter date, and good on the 28th. Good hauls were taken in June on the 1st and 3rd, and fair on the 6th and 18th. During the week of the 10th several bankers arrived, averaging 30 quintals of cod per boat. On July 1 it was reported that the boats averaged from 35 to 40 quintals the past week. Cod appeared plenty on the 23rd and 30th of this month, and very plenty each day of the week of August 5. Good fishing was engaged in on the 13th and fair on the 28th of August. During the past season, some boats averaged from 500 to 600 quintals, and the catch is considered smaller than for the past two years.

*Herring* struck in plentiful on May 2 and continued so to the 14th, when there was an improvement in this fishery, and very good stops were made from the 14th to 19th. Herring were again in good catches on the 25th, and were not reported, afterwards until August 28, when they appeared to be fairly plentiful, which continued in September with very good catches.

*Lobsters*.—Operations began a week after the harbour was clear of ice, and light quantities were taken on May 10. From this date to the 28th, lobsters were taken in catches varying from good to fair. Good fishing was reported in June on the 1st, 3rd, 6th and 18th. The season's catch is considered below that of last year.

*Salmon* appeared this season about May 28, in light catches, which continued throughout the season. The catch this season was a poor one.

*Mackerel* first appeared on July 23, in light quantities. Fair catches were reported on the 30th, and small fares on August 13. The total catch was light this season.

*Clams* were reported in good supply throughout the season.

The bankers were kept in good supply with clams and herring bait, which were abundant during the past season.

GRAND MANAN.

Reporter : Mr. Charles Dixon.

*Cod*.—The first fish caught on hand lines this season was taken on May 24 and 25, at Gravelly Bottom. The schooner *Mystery* reported a catch of 12 quintals of fine cod, and the schooner *Falcon* 6 quintals. Two vessels on Saturday, June 1, had 8 quintals each of large cod. The fishing was poor after owing to bad weather, until the 6th, 7th and 8th, when the fishery improved somewhat and 10 quintals of fine cod were averaged per day by the vessels. Monday the 10th, cod fishing was good on the Gravel Bottom, and 10 quintals were obtained by the smaller vessels, and fair after during the whole week. Boats got as high as 15 quintals per day the following week, and during the last week in June the small crafts averaged from 7 to 10 quintals per day. The July cod fishing opened up fair on Bulkhead and Gravel Bottom, and on several days of the week of the 10th, very good fares of large size fish were reported, which the fishermen said



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was the best fishing they had engaged in for a number of years. About this time the fishery was also good at South-head. From 7 to 10 quintals per day were taken the last week in July on the Bulkhead. The catch of cod was very good the first week of August, with boats averaging from 10 to 12 quintals per day, and the week of the 12th saw the last of the line fishing, as well as the trawling, as the troublesome dogfish now appeared and took possession of the fishing grounds. The total catch is estimated at 800 quintals, or an increase of 300 quintals over last year's production.

*Haddock* were first reported along this coast in light quantities, on June 6, at Long Island bay, but on the 12th and 13th of this month good fishing was reported in the North channel, where one vessel caught in four days 40,000 pounds of hake and haddock. Fair catches were reported on July 1, and small quantities were taken after for the balance of the season. The catch of haddock this season is estimated at 500 quintals, or a decrease of 300 quintals as compared with last year.

*Halibut* were first reported at Gravel Bottom on June 11. A few were also taken the last week of this month, and on July 13, halibut was reported at South head. Catches of fine halibut were made at South head reef on the 27th, and on Bulk head August 10.

*Hake* first put in an appearance at Swallow-tail on June 5, with small boats averaging as high as 5 quintals a day for two days' fishing. Hake was fair off Swallow-tail the first part of the week of the 15th, but in the North channel extra good fishing was reported. The following week boats got from 5 to 8 quintals a day off Swallow-tail, and the latter part of June 4 quintals per day were taken. In July the catches varied from very good to poor. The catch of hake on August 1 was slim, but the last part of the first week was very much better, and from 5 to 6 quintals per boat were taken in the North channel. Hake disappeared from our coast about August 10, and the cause was assigned to the plentitude of dogfish all along our shores. The catch this season is smaller than usual. About 1,300 quintals were secured, which is 2,200 quintals below that of 1900. In addition to this catch 200 casks of fish oil were put up at this station.

*Lobster*.—The fishing throughout the season was reported fairly good and the factory at Grand Harbour had an output of 140,496 pounds. About 5,000 cwt. of fresh lobsters were exported to the United States.

*Herring* of a small size were first reported on May 27, when this fish was used for bait. They were caught in weirs at Quoddy river. Large size herring were reported on June 3, four miles off from Big Duck island, and on the 14th at Whale cove, 200 were averaged by nets. On the 22nd the net fishermen were getting 1 barrel of herring to a boat each night, which were sold for bait. The following week some large fish were netted at Swallow-tail and Whale cove, and at Seal cove a quantity of small fish were taken. One weir had a catch of about 25 hogshead. Herring were scarce on July 1, and fishermen were forced to go to Campobello island for herring caught in weirs there. Large herring appeared again on this coast and at the Soundings on the 20th one boat caught 15 barrels, and a few mediums were taken at South-head. At Bradford head on the 27th one vessel netted 25 barrels of herring, and on the same night Long island weirs reported a haul of 100 hogsheads of fine herring. Fair netting was also reported this week at Whale cove, about 4 barrels to a boat. Plenty of herring was reported at Whale cove on August 3, with 10 barrels to a boat, and on the 10th the herring fishery was very good all over the island, which continued to the latter part of the month, when herring became scarce. During the last week in August, Capt. Pratt, of the F. P. S. cruiser *Curlew* seized seven vessels for an infringement of the law, and towed them to St. Andrew's, N.B.

Good catches of herring were reported at Cheney's head and Grand harbour September 7, and on the 14th the weirs at Cheney's head, Nantucket island and Seal cove were full of large fish. Several fishermen were seized and fined \$50 to \$100 a vessel for setting their nets on 'spawning grounds'. The fishing in the weirs at Cheney's head and Nantucket island, on September 21, was exceptionally good and some weirs sold as high as \$900 worth in one day. On the 26th Cow passage weirs reported 400 hogsheads and at Cheney's head about 20 to 30 barrels per boat. The net fishermen did fairly well the first week in October and a catch of 75 to 100 half barrels to a boat was made. At Long Island bay on the 12th the vessels averaged from 100 to

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200 half barrels herring and 2 weirs at Two islands caught the first of this week, very large quantities, of which, one weir sold \$2,200 worth, one night's fishing. During the season, 7,500 half barrels of pickled herring were taken and about 20,000 barrels of fresh fish exported to the United States. Two millions boxes of small or medium size fish were smoked and 3,000 boxes of kippered herring packed similar to smoked were put up. The kippered herring factory at North head has canned about 3,000 cases this season.

*Pollock* were again very plenty on this coast this season, and on May 15 and 61 32,000 fish were landed. The fishermen it is reported were using dynamite and at times the waters were left white with fish, that could not be carried away. Only one casualty was reported, that of a young fisherman, who was chasing a school of this fish, having met his death, by a sudden discharge of this explosive. Fair quantities were taken in June and July, and on August 3 good fishing of pollock was reported on the Bulkhead and Grand harbour, which continued to the close of the season. The catch this season is on a par with that of last year and is estimated at 4,000 quintals.

## SHIPPEGAN.

*Reporter : Miss Marie Landry.*

*Cod* fishing commenced about May 27, and during the past week 50 quintals were taken. Fairly good fishing was reported in June and several large hauls were made. Very good fishing was reported in July and August, and the total catch is said to have been better than last year. The fishermen were very fortunate this season as bait was always obtainable and fine weather prevailed. On their return from the fishing grounds, generally on a Saturday the fleet would enter the bay with all flags up, which was a sure indication of a very successful week's fishing. The total catch is estimated at 15,000 qtls. which is an excess of 4,000 qtls. over last year.

There have been about 3,000 codfish caught since October 26, when annual returns were sent in.

*Haddock*.—About 100 haddock were caught during the week of July 22, and fair fishing was reported on August 2 and 6.

*Halibut* fishing was poor and about 20 were captured this season.

*Herring* struck in plentiful early in May and good fishing resulted which continued for a short period, during which large hauls were made. Over 1,000 barrels were taken this season, which in comparison with former years, is an exceptionally good season's catch.

*Lobster* fishing opened very favourably about May 6 and good catches were reported to the end of the month and also in with boats averaging from 400 to 1,500 crustaceans. From July 1 to the close of the season, the 10th inst., boats had from 50 to 450 lobsters. Several factories ceased operations in June after packing 350 boxes, whilst the pack of those that continued to the close of the season, swelled up to 400 and 500 boxes. Generally speaking the season's pack is said to have been better than last year's and will average about 300 boxes a factory. All the lobsters were exported to foreign parts by sailing vessels.

*Mackerel* fishing was very poor this season and of a short duration. The fish appeared about July 10, when 200 were taken and a similar quantity were caught on the 12th. During the week of the 15th a stop of 600 mackerel was made. About 60 barrels will represent the total season's catch or a little better by 10 barrels over last year's. There were none shipped fresh as no ice was obtainable at the time.

*Salmon*, as reported, were taken in catches varying from very good to poor, from May 20 to July 15. About 14,000 lbs. were shipped in ice, by rail to the United States.

*Smelt* fishing will be very good, for already over 1,000 lbs. have been exported to United States, Toronto and Montreal. Between the dates of October 26 and December 1, about 4,000 lbs. fresh frozen smelts were shipped by rail to New York.



## SESSIONAL PAPER No. 22

*Clam* fishing was very good on the Shippegan coast this season, and over 2,000 barrels were sold this year. Some inhabitants of the parish made their living by vigorously prosecuting this branch of the fishing industry. This catch has been augmented by 500 barrels, which have been taken to December 1.

## QUEBEC.

## DOUGLASTOWN.

*Reporter : Mr. Chas. Viets.*

*Caplin* were reported in fair catches on June 1 and 10.

*Cod* fishing commenced here about May 21, from which date to the close of the month, the catch was on an average fair. The June fishing varied from fair to poor, with the exception of the 18th, 19th and 20th, when good hauls were made. In July, codfish were reported in catches from good to fair, and from the 6th to the end of August, from good to poor. A few fair reports were received in September and October. The codfishery this year, has been considered very good the early part of the season, but the fall fishing was a failure, owing to the scarcity of fish and rough weather.

*Haddock* appeared in July, and were reported plenty on the 23rd, and fair on the 26th.

*Halibut*.—Fair fishing of halibut was reported from July 24 to 28.

*Herring*.—Fair fishing was reported on May 1, and from the following day to the 27th, were taken in quantities varying from very good to poor. Herring struck in plenty on June 2, and from the 10th to 29th, from fair to poor catches were reported. The herring fishery varied in catches from fair to poor, from July 1 to August 16. The usual fall run of herring did not materialize this season.

*Lobsters*.—First appearance of lobsters were reported on May 2, from which date until the 21st of the same month, the average catch was fair. After this lobsters became poor to the close of the season.

*Launce* appeared in good catches on June 11, and from June 19 to 26, good and regular hauls were made. Good quantities were taken in July from the 1st to 18th, and for the next seven days launce struck in very plentiful, and excellent hauls were made. Fair reports were received on the 26th to 27th, and poor after to August 21 to 28, when good fishing was again reported.

*Mackerel*.—A few mackerel were reported on July 5 and 6.

*Salmon* were first reported when a few were taken in the Basin on May 8. Light quantities were taken on May 14, 15 and 16, and from good to poor after to the end of June.

*Trout* appeared in good numbers on May 2, and from May 10 to 30, were taken in catches varying from fair to poor. Fair fishing was also reported on June 4, 5 and 6.

*Clams* were reported plenty on May 3, and were utilized for bait until the appearance of squid on the coast.

*Squid*.—Light quantities were taken the latter part of August, and on September 20 and 28, squid were reported plenty.

There has been a marked shrinkage this season in the catches of herring, lobsters and salmon.

## GASCONS.

*Reporter : Mrs. A. E. Brotherton.*

*Caplin* appeared in good quantities on June 3, and from the 10th to the 22nd were taken in catches varying from very good to poor.

*Cod* were first reported on May 18, but the catches were light until the 21st, when the fishing was fairly good to the end of the month. The inshore fishery in June varied

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from very good to poor, and the last week of the month was poor on account of the scarcity of bait. This week on the banks was very good and boats averaged from ten to twelve drafts. The July fishing inshore was on an average good, and on the 13th bankers were averaging from 15 to 20 drafts per boat. A very good improvement was noticeable in the inshore fishery in August, and from very good to fair reports were received at the bureau daily, with boats reporting from ten to fifteen drafts offshore. The fishing was poor the first week of September on account of dogfish and scarcity of bait, but on the 9th, and from this date to the 20th of the same month, fair hauls were made whenever the weather permitted. Very strong winds prevented a further prosecution of this fishery until October 7, when fair catches were taken on the 12th. In September the fishermen weighed the dry cod caught the first part of the season, and it made an aggregate of 3,000 quintals. The codfishery was considered very good this year and better than last, notwithstanding the rough weather during the season greatly retarded the progress of the same. The catch is estimated at 8,000 quintals.

*Herring* struck in plentiful on May 3, and from the 6th to 31st were taken in catches from very good to fair. Very good stops were made on June 3, and during the month the catches varied from good to poor. In July fair hauls were reported each day from the 4th to the 20th, and poor after until the 29th and 31st, when fair quantities were again taken. The August catch varied from good to poor from the 1st to 12th, after which very inclement weather set in and with the presence of the troublesome dogfish the operations of this important industry were entirely suspended until about the middle of September, when a few fair stops were made. The herring fishery this season was considered on an average good.

*Lobsters* first appeared about May 3, and remained in fair quantities until the 21st, but after this the catch was irregular and poor. The fishing on the whole was considered poor this season. There was only one factory in operation during the year and the output was 200 boxes, which were shipped to Dalhousie.

*Salmon* first appeared fair on May 24 and varied from this condition to poor to June 10. On the latter date salmon struck in good quantities and from now to the last of the month were taken in catches from fair to light. Small quantities of salmon were caught on July 3, 4 and 8. The catch this season was considered fairly good, and about 9,000 pounds were shipped in ice to Dalhousie.

*Squid* were reported plentiful in August, September and October, and sufficient was taken for bait.

There are about 100 vessels engaged in the fishing industry at this station, and the fishermen were all satisfied with their season's work in the codfishery. The fish after being caught are dried and sold at the highest prices. Nearly the whole catch this season was shipped by vessels to the Halifax market.

## GRAND RIVER.

*Reporter : Mrs. J. Carbery.*

*Caplin* were first reported on May 28, in fair quantities. From June 3 to 21, inclusive, they were taken in catches varying from very good to fair. During July caplin were reported plentiful.

*Cod*.—Good catches of cod were reported on May 15, and one boat from the banks arrived with twelve drafts. Fair fishing was afterwards reported to the end of the month, excepting the 23rd, when very good hauls were made. On July 13 some boats had over thirty drafts cod. The bank and inshore catch this summer was considered very good up to September 1, but after this date the troublesome dogfish swarmed both inshore and on the banks and greatly hindered the prosecution of this fishery. This was followed by rough and inclement weather, which resulted in no fall catch.

*Herring* struck in on May 2 plentifully, and during the balance of the month fair and regular catches were made. The catch in June varied from good to fair and a few good hauls were made the early part of July. Herring were reported plentiful on August 2 and fair on the 15th. The fall catch was poor, but sufficient quantities were taken all through the summer for bait.

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*Lobsters* were reported fair on May 1 and remained so until June 6, afterwards becoming scarce to the close of the season, with a small catch of small size fish. This fishery continues steadily on the decline.

*Mackerel* made its appearance this season in fair quantities, but for many years back this fish has become very scarce.

*Salmon* were first reported on May 20 fair. The net fishing has been good during the season and the fish of a large size.

*Squid* has been plenty all the fall. It appeared on our shores early in August.

## NEWPORT POINT.

Reporter : *Mrs. Meunier.*

*Caplin* were reported plenty the first week in June and also on the 13th. Very good catches were taken on the 12th of the same month.

*Cod*.—On May 18 two drafts of cod were taken by boats offshore, but the inshore fishery commenced ten days earlier than last year and the first fair report was received on May 20, when codfish were fair, which continued to the 31st when the fish appeared very plentiful. During the following month the catches were from fair to poor and in July the cod fishery improved with catches reported daily varying from very good to fair. In June, on the 21st and 27th bankers in reported good fares on the banks, with boats averaging from ten to thirty drafts of cod, and on July 11, bankers had from ten to twenty-three drafts. The catch in August was on an average fair, and during the latter part of the month bankers had from fifteen to thirty-eight drafts of codfish. Good hauls were taken on September 6 and 27, and fair on the 19th, 20th and 28th. In October, on the 5th, 9th and 12th, the codfishery was fair. The total catch for the season is estimated at 6,700 quintals.

*Herring* were reported on May 1 in light quantities, and on the following day struck in plentiful. From the 6th to the close of the month, herring were taken in catches varying from very good to poor. Fair fishing was reported on the 6th, 13th and 28th and good on June 18. From July 2 to July 24, the herring fishery varied from very good to fair. Good stops were made on August 8 and fair on the 16th and 20th. The fishing was poor after, as large quantities of dogfish were on the coast.

*Lobsters*.—The first report received on May 1 indicated fair fishing, which improved to good next day, and from May 6 to May 15 lobsters were taken in catches varying from good to poor. This fishery was rather poor after the 27th, when fair fishing was reported to the end of the month. Nothing was done afterwards to the close of the season. The total catch is estimated at 700 cases.

*Salmon*.—Fair quantities of salmon were taken the last week in May and from June 4 to June 14. The total catch this season is estimated at 900 pounds.

*Squid*.—Struck in plenty on August 8, and for the balance of the month were taken in catches varying from very good to fair. Good reports of squid were received during the remainder of the season.

## PASPEBIAC.

Reporter : *Miss Ada Beck.*

*Caplin*.—Fair catches were reported on May 21, and about the last of the month increased to good, after gradually decreasing to fair the first four days in June. On the 6th of the same month, the fishing was reported very good, and scarce after to the close of the season.

*Cod* fishing commenced May 21, on which date and the 25th fair reports were received and poor afterwards to the close of the month. From June 1 to August 1 the cod fishing varied from fair to poor. During the month of August and the early part of September fair and regular catches were reported almost daily. From September 15 and for the balance of the season the fishing was light, owing to the prevalence of high winds and a scarcity of bait.



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*Herring* struck in great abundance at this station on May 2, and on the following days to the 16th some excellent catches were made. On the 17th and 21st the catches were fair and poor afterwards until June 1, 4 and 20, when fair fishing was again reported. *Herring* were scarce after until July 8, 9, 10 and 12, when the fish appeared in fair quantities. Nothing was done in this line after to the remainder of the season.

*Squid*.—Fair catches of squid were reported on September 14 and 27.

## PERCÉ.

*Reporter* : Mr. E. G. Tuzeau.

*Cod*.—The catch of cod at the beginning of the season was very good with a fair quantity of bait obtainable, and the boats averaging 250 quintals up to August 15. The fall catch to September 15 was fair, but since then has been a partial failure, owing to the scarcity of bait and the roughness of the weather, to which may be added the appearance in our waters of the unwelcomed dogfish. Cod first appeared about May 15.

*Caplin* were reported good on June 5.

*Herring* were reported on May 1 fairly plenty, and the catch throughout the month was on an average fair. During June, July and a portion of August they were taken in quantities varying from good to poor. The fall catch has been a complete failure.

*Lobsters* were first reported on May 1 in fair quantities, and the catches continued so up to the 28th and 29th, on which dates lobsters were said to have been fairly plentiful. They were afterwards scarce for the balance of the season. Although the lobsters caught this season were of an average size, the total catch was small, and is considered the smallest quantity taken at this station for a number of years.

*Salmon* were reported taken in good quantities on June 5.

*Squid* appeared on August 1, and during the remainder of the month some good catches were made. In September the catch varied from good to poor, and afterwards very irregular for the remainder of the season.

## POINT ST. PETER.

*Reporter* : Mrs. E. Bond.

*Cod* were first reported on May 14 in light quantities, and throughout the greater part of June the catches were fair. For the week ending 22nd, cod boats averaged 24 drafts, and for the succeeding seven days cod were plenty, with boats landing 42, 100, 108 and 116 drafts. Very good fishing was reported in July, but the August fare varied from good to fair. During the remainder of the season the catches were very light, owing to high winds and rough weather. The total catch for the season is estimated better than last year.

*Herring* were first reported on May 1 in fair catches. From this date until June 11 the catch varied from good to fair. For the remainder of the season herring were very scarce, but the total catch is considered in advance of last season's. None were salted this season.

*Lobsters*.—Good catches of lobsters were reported on May 1 and fair up to the 10th, afterwards becoming scarce until the closing of the factories about June 25. The catch is below that of last year's.

*Mackerel*.—A small catch of very large mackerel, about twenty-five in number, was reported along this coast this season. This stop was made the early part of July, in two or three catches.

*Salmon* were reported on May 13, and fair catches were made during the month. The June catch varied from good to fair, and for the remainder of the season the fishing was light. Total catch ahead of last season's.

*Squid* made its appearance about July 31 in good quantities, and continued so during a portion of August. The September catch was fairly good.



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## SEVEN ISLANDS.

*Reporter : Mr. P. E. Vignault.*

*Caplin* were not reported this season.

*Cod* fishing commenced about June 15 with light catches. Light fares were made afterwards until the months of August and September, when, with fine weather prevailing, good hauls were reported. In October, rough weather prevented good fishing. The season's catch is considered about double that of last year's.

*Herring* were taken in fair quantities on May 27, and on June 3 and 10.

*Salmon* first appeared on May 16 in light quantities. From May 29 to June 12 good fares were made, and the salmon fishing it is said has been very good this season on the western part of this division.

*Squid* has been reported in good catches in August and September.

*Launce.*—Very good catches of launce were taken in June, July and August.

## MOISIE.

*Caplin.*—Fair catches of caplin were reported on June 10.

*Cod.*—From fair to poor catches of cod were made on May 27 and fair in July and August and early part of September.

*Salmon* fishing commenced on May 16 when light quantities were taken. From this date to June 26, very good catches were reported.

*Launce* were very plentiful in July and August.

*Squid.*—Good quantities of squid were taken in August and September.

## ST. MARGUERITE.

*Cod* struck in on July 12, and from now to August 22 were taken in fair catches. Very good fishing was reported on August 27 and 29. Cod were fair again on September 19 and October 4 and 5.

*Salmon.*—Light quantities were taken on May 22, and fair June 5.

*Launce.*—Very good catches were taken July 12, 18 and 23, and first week in August.

*Squid* were plenty in August, September and on October 4 and 5.

## SOUTH-WEST POINT, ANTICOSTI.

*Reporter : Miss Z. Lemieux.*

*Caplin* were in catches varying from very good to fair, from June 19 to 26.

*Cod* were first reported on May 28 and scarce after until June 11, when fair hauls were again made. From very good to fair fishing was reported between the 19th and 26th instant. The July and August catch was generally poor, but the catches to September 16 were, on an average, fair. From this date to the close of the season bad weather impeded fishing and scarcely any catches were reported.

*Herring* struck in fair quantities on May 10, and during the last week of the month very good hauls were made. Fair catches were taken at intervals during the remainder of the season when the weather permitted. The cod and herring fisheries engaged the attention of the fishermen all around the island, but the largest fares were made at Fox bay and English bay.

*Lobsters* were first reported fair on May 23, and were taken such to the end of the month with few exceptions. Fair and regular catches of lobsters were reported daily throughout June, but the fishing varied from fair to poor to the close of the season, July 31. The lobster operations were carried on at Fox bay.

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*Salmon* fishing commenced on June 15 fair, but was poor to the 24th, when fair fishing was reported each day to the last of the month. The salmon fishing in July varied from fair to poor. The catch which was considered a good one was chiefly made at Shallop's creek.

*Squid*.—Fair quantities of squid were taken from August 15 to September 7, after which they struck in great abundance and very good catches were reported. The fishing operations were entirely suspended in October.

## MAGDALEN ISLANDS.

*Reporter : Mr. J. A. Lebourdais.*

*Codfish* appeared on the coast on May 10 fairly abundant, but owing partially to the small number of men engaged in trawling and the severity of the weather the catches were very light. Good hauls were made on the 15th, 16th, 17th and 18th, and fair to the end of the month. Cod were again reported fair during June, but the fares were poor, attributable to the scarcity of bait. In July, cod were fairly plenty, but no bait was obtainable, and only fair catches resulted. On August 19 large quantities of cod were reported some distance off the islands and when the weather permitted large hauls were made. During September the offshore fishing was good, the inshore very poor and the weather rather rough. Very little fishing was done in October owing to the severity of the weather.

*Herring* struck in plentifully about April 15 in different localities around the islands, and good stops were made, which continued throughout May varying in catch from this to fair. They were afterwards scarce, until the 8th of July, when small quantities of large size herring were taken. Large quantities were secured for bait and a large fleet of strange fishing vessels baited here this summer.

*Lobsters* were first taken on May 10 in fair quantities, and the following week good fishing was reported on the south part of the islands and poor on the north. Fair catches were made on the 20th and 27th of May in different parts of the islands, but the prospects were very poor as the weather was very blowy. On the 3rd June the fishing was reported from fair to poor all over the islands. Heavy gales on Saturday, June 15, destroyed large quantities of traps and gears, after which the catch became poorer and poorer to the close of the season. The lobsters caught this season were smaller than usual.

*Mackerel* appeared on the coast about May 31, and the catches by nets were very good, especially on June 4 and 5, when large quantities were taken for the number of nets set. They were afterwards scarce until the 16th of July, when the fish were fairly abundant and good fishing was reported. The August catch varied from very good to poor, and from good to fair in September. The catch of mackerel this season has been very good, particularly in the Pleasant bay district, where the fish has been better than for many years past and on the whole the fishing around the islands this season is on an average good.

The schooner *Little Heir* of 13 tons burthen, Captain Maillet, was lost on the Magdalen islands this spring. She had called here for a cargo of herring. The crew were saved.

Supplement No. 1, to the Thirty-Fourth Annual Report of the Department of Marine and Fisheries

## FISHERIES

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# SPECIAL REPORTS

ON

- I.—The Hatching and Planting of Trout.
- II.—The Planting of Predaceous Fish.
- III.—The Aim and Method of Fishery Legislation.

BY

PROFESSOR E. E. PRINCE, F.R.S., CANADA,

*Dominion Commissioner of Fisheries.*

1901



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1902





# SPECIAL REPORTS

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## SPECIAL REPORTS.

### No. 1.—ON THE HATCHING AND PLANTING OF TROUT.

BY PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND GENERAL INSPECTOR OF FISHERIES FOR CANADA.

In the hatching of trout and salmon, whose ova are comparatively large and heavy, it is usual to place the eggs in shallow perforated trays over which pure fresh water passes during the period of incubation. If the eggs are loosely spread so that they do not unduly press upon each other, and if frost, excess of light, deleterious chemical or other influences are guarded against, the process of artificial hatching can be accomplished with facility. More than thirty years ago the Commissioner of Irish Fisheries hatched a quantity of salmon by a simple incubating apparatus in his office in the Customs House, Dublin—a clear proof that the obstacles to success are not serious.

Before commencing artificial fish-culture for the purpose of stocking any waters, it is necessary to prove as a first step that the waters are suitable. Even streams and lakes, which once abounded with trout, may, during the process of depletion, have become altered in character, and no longer possess their former favourable features. A few adult trout transplanted from other waters will in a single season afford the required information. If the fish survive and flourish, there need be no fear of success. Such information is especially necessary in the case of artificial ponds or of waters which it is proposed to stock for the first time. Under conditions which are really unfavourable speckled trout will, of course, live, but not in a healthy, vigorous state. They will even survive in shallow stagnant water, where the supply is small and uncertain, but very different conditions are necessary for successful trout-culture.

If it is intended to hatch and rear trout from the egg, the parent fish must be secured before the close season begins and retained in a pond until ripe, otherwise trout can only be secured by obtaining from the Minister of Marine and Fisheries a special permit, the conditions attached to which are very stringent. Trout, when two years old, will yield spawn, but as the number of eggs yielded by them is small, and the eggs have been proved to be less hardy than those of older fish, it is preferable to select parent fish not younger than four years and not older than twelve years. Moreover, the larger fish furnish a greater number of eggs, the amount being about 900 for every pound weight of the parent, and the eggs themselves are of larger size. A salmon produces eggs at least one-third larger than those of a small grilse, and the fry hatched from eggs of large size have been found to be finer, healthier, and of more rapid growth than from smaller eggs. This is as true also of trout. The spawning season extends over a long period, and individuals containing ripe eggs may be found from late fall until spring. It is not necessary to describe the methods of obtaining parent trout, though the drag seine of 1-in. bar, *i. e.*, about 2-in. extension mesh, is very effective. The seine being an excessively destructive net is generally discouraged in Canadian waters, however, and it must not be forgotten that the barring of small streams frequented by trout and other fish is forbidden by law.

The requisite number of parent trout having been obtained and confined in a small pond ready for artificial spawning, it is necessary for at least two operators to assist in the work, one to perform the "stripping," the other to net the fish, as required and hand the vessels, &c., to the operator. Kneeling on the ground the operator firmly but gently lifts a fish by the tail out of the landing net, using his left hand and rests its head for a moment on a towel, lightly passing his right hand towards the throat and grasping it with the open thumb and forefinger under the breast fins, the other three

fingers of the right hand being pressed upon the left gill-cover of the fish. The back of the fish is pressed against the right breast of the operator and the tail bent back and upward. If the fish is fully ripe, the ripe eggs will shoot out in a continuous stream and the assistant completes the operation by gently pressing upon the under side of the fish and passing his hand from the head towards the tail to expel the eggs that may not have run out. The eggs should not fall far, so that the assistant should hold or place on the left of the operator the shallow dish, which is to receive the eggs. No force is necessary. If the eggs refuse to stream out, the fish is most probably not fully ripe, and a little patience will prove that. Some fish refuse for a minute or two to yield their spawn, and old fish always spawn less freely than young examples. Some manipulators wrap the fish in a towel, leaving the snout and hind part of the body free, others hold the fish's head or shoulders in the left hand, and grasp the under side of the body with the right hand, holding the tail down and slightly pressing with the right thumb. There are disadvantages connected with these methods; but in all alike patience and gentle handling are essential. The fish should not be unduly disturbed or roughly treated, and spawning can thus be accomplished without the slightest possibility of injury. Very large and strong fish may demand the united efforts of two operators. When four or five female fish have been spawned into the plate yielding, say, 10,000 ova, the assistant must then land in succession two or three ripe males. Each fish should be brought close to the eggs as they lie in the plate, and as soon as the abdomen touches the eggs a large flow of creamy milt will be forcibly ejected. The plate should be turned round as each new male is brought so that all the eggs may receive a share of the fluid milt. A slight pressure of the right thumb and finger behind the breast fins and further back will increase the flow. The milt of a single male will suffice for an extraordinary number of eggs if both sexes be in fully ripe condition, and in case of necessity one male may with confidence be used to fertilize the ova of five or six females; but where possible the first named proportion is safest. The vivifying or fertilization of the egg will be aided by gently stirring them with a clean feather after milting, and adding half a pint of water to dilute the creamy milt. Each dish when thus filled and stirred should be placed on one side and five more females spawned into another dish. In half an hour they should be transferred to a larger vessel, a clean wooden bucket, and placed under a gentle flow of clean water, to wash all impurities and excess of milt away. The eggs will appear no longer soft and yielding, and instead of clinging together will be hard to the touch and separate from each other. They are very elastic and will endure great pressure. Thus Frank Buckland, the most famous of English pisciculturists placed upon some trout eggs a weight not less than five pounds six ounces before he could crush them. Nevertheless pressure especially upon newly fertilized eggs is highly injurious.

It is necessary to place the eggs, after being cleaned, upon the hatching trays. These consist of lightly made square frames of wood, across which is stretched japanned wire cloth, though in the Government hatcheries perforated tinned trays, black japanned, have been found advantageous.

The following five conditions are necessary for successful hatching :—

- (1) A supply of water which is regular and unailing.
- (2) Water of even temperature, that supplied from a spring at some depth beneath the ground is preferable.
- (3) Freedom from impurities and sediment, which suffocate the eggs, hence the supply of water should run into a tank to allow sediment to settle before it runs over the hatching trays.
- (4) The quantity desirable is about 100 gallons per hour for 10,000 eggs. The greater the quantity of water the better, as eggs actually breathe water and need ample supplies of oxygen which the fresh inflow of water contains.
- (5) Protection from floods by means of guards and an overflow ditch higher up than the supply pipe. While spring water from its equable temperature, purity and other features is always preferable, yet when incubation has advanced to what is called the eyed-egg stage, water from a brook or river will serve quite well.

Trout eggs hatch out in from 50 to 150 days, according to the temperature, amount, and rapidity, as well as the character, of the water. Water from limestone



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strata is generally held to be best, and the greater the quantity of water the longer can incubation be protracted. Temperature is of course most potent, and a change of one degree Fahr. rise or fall, shortens or lengthens the process of incubation four or five days. Eggs of trout which hatch out in 50 days when the temperature of the water is kept at 50° Fahr., will take 100 days if the temperature is kept as low as 40°. The filled hatching trays are placed in wooden tanks open at the top, and a flow of water through the boxes must be arranged to ensure two inches or less of water over the eggs. Direct light should be excluded to discourage fungus growth. Dead eggs should be picked out each day. When eggs die they lose their delicate transparency and bloom, and assume a dead white appearance, and unless removed a feathery fungus rapidly covers the egg, and spreads to other healthy eggs. Hence the necessity for promptly removing them. If eggs require moving on the tray it should be done gently with a soft camel-hair pencil or brush. They may be softly swept into a spoon when it is desired to remove a few from the tray. A tray may be emptied by lifting it out of the water and skilfully overturning it into a dish. Eggs must never be touched by the hand, and dead eggs are best removed with wooden pincers or forceps.

Hatching and rearing boxes require to be blackened inside. Charring is much to be preferred to black varnish. Black paint must be avoided. Hot blocks of iron 20 lbs. or 28 lbs. weight are closely applied to the surface to be charred and this close contact prevents burning. All boxes, trays, &c., after charring, varnishing, &c., must be well seasoned in water some time before hatching operations begin.

When the delicate young fry, called "alevins," begin to hatch they do so in such numbers that special tanks are necessary to which to transfer them. Many of the fry cannot free themselves from the egg-shell or capsule, and require a little skilful help by means of an artist's camel-hair brush. When not more than two hours old the little fish have intelligence enough to dart away from danger. It requires some agility to capture one with a spoon. A scoop of fine gauze or perforated zinc is effective.

The following points may be noted in connection with managing the fry:—

- (1) They should be exposed to very little light.
- (2) No food is required until the large bag of yolk attached to each alevin is almost absorbed.
- (3) Prevent massing together, their jelly-like bodies when crowded together result in suffocation and death.
- (4) Cover the exit with fine gauze to prevent the tail and yolk sac of some of the fry passing through, and occasionally sweep them gently away from the point of outflow.

Before the yolk is gone, trout fry will pick up minute particles of food, and, indeed, if fry are kept more than six or seven weeks, systematic feeding must be resorted to. At the Restigouche hatchery, Mr. Alex. Mowat was granted permission in 1899 to retain and rear 10,000 sea salmon fry until they were six months old, when many of them reached three inches in length. This very successful attempt is referred to in the report by the officer named (*See Department's Report for that year, Appendix 11, Fish-Culture Operations*) from which I quote the following:—

As regards the 10,000 fry retained at the hatchery in open air tanks until six months old, the experiment was most successful. Many of these little fish were fully 3 inches in length when liberated in the autumn. The food for the fry consists of pulverized liver and raw fish, the fish only being used as a fluid food, and the liver grated into powder. A great amount of attention and care must attend the work of feeding the fry, and keeping all dead and decayed matter removed from the tanks. I am confident that from the trial made during the past summer at the Dee Side hatchery, that large numbers of the fry can be fed and reared in the tanks for at least six months before being liberated.

The utility of using other fish, in a powdered or mashed state for the sustenance of advanced fry was suggested long ago by that pioneer in fish-culture on this continent, Dr. Theodatus Garlick, of Cleveland, Ohio, U.S.A.\* Dr. Garlick, in his interesting little 'Treatise on the Artificial Propagation of Certain Kinds of Fish' published in 1857,

\* *Vide* my paper on "Fish-Culture in Canada" *Transact. Ottawa Lit. and Sci. Soc.*, Part II., p. 164.

said (p. 89.): It has been ascertained that the lean flesh of animals, when boiled, is an excellent article of food for young fish, or even old ones. As the fish are very small, it is necessary to hash it up into very fine particles or they will swallow it; in fact, it should be pounded or grated very fine, but as they increase in size, it may be given in coarser particles. The flesh of other kinds of fishes, where they are plenty, would be an excellent substitute for the flesh of animals, either cooked or uncooked; I think this kind of food preferable to any other.

The question has often been discussed whether fry whose incubation has been protracted are stronger than those which have been hatched earlier under a higher temperature. Certainly the mortality in broods of English trout hatched in water below 40° F. is far less than when the water is of a higher temperature. The same has been found to be true of the Canadian speckled trout and the Rainbow trout.

In a series of ova which had reached an advanced stage in water of 48° F., and were then placed in trays supplied with water 10° lower, the hatching out did not take place until the 120th day, though they are known to hatch in 50 or 60 days under a higher temperature. The resulting fry are more robust, and fewer die during the early stages after liberation from the egg than in those hatched at a temperature of 48° to 60°. Actual tests on spawning beds have shown that for long periods the water may not rise above 34° or 35° until April, and the period of hatching is therefore prolonged to 150 or 160 days, with the result that the fry are stronger and more healthy.

In accordance with the conditions which obtain in nature, the fry, after exclusion from the egg, should not be subjected to very low temperatures, but water ranging from 45° to 55° is most suitable. The carrying of fry to the localities where they are to be deposited is an important matter. Railway journeys, if not too protracted, do little harm to fry, unless the cans or tanks holding them are kept too near a stove or hot pipes. Excessive heat often proves fatal in railway cars, but as a rule, journeys by rail are less perilous than by team over rough roads, when the shocks and collisions seriously disarrange the delicate organization of the young fry, and damage it is believed the sensitive otocysts of the little fish. Team-drives over rough trails through forests are not conducive to the well-being of fry, and when possible, cans should be carried, in the manner described later, over very rocky or uneven tracts. Conveyance by boat or canoe is by far the best mode. Cans specially contrived for the purpose are best, and should be made of heavy galvanized iron† or stout iron well tinned, and holding 10 to 12 gallons of water. They may be 24 or 26 inches high, and say 18 inches in diameter, but may be of the form of a truncated cone, with a narrow neck in the centre for the purpose of preventing the splashing and loss of water as far as possible. Into the neck (say 6 inches in diameter), a cylindrical can fits, the bottom of which is made of fine metal gauze. The gauze not only allows of aëration, but when necessary serves as a receptacle for pieces of ice, which, melting, trickles into the water below in which the fish are swimming about. The ice is often broken up into fine pieces or crushed, if it does not melt and cool the water properly. It should always be remembered that the young fishes, above all salmonoid fishes, cannot endure heat, nor are they able to withstand frost with impunity. Indeed, ice placed in the lid of the can or tank has proved harmful when on warm days the fry have been surrounded for some hours by water of 50° or 60°. Hence the advisability of transporting young fish either in the early spring months or during the night, and at early morning when the season is warmer and more advanced. At such times they can be most safely shipped.

It is well known that newly hatched fish are far less hardy than eggs. But even eggs during the first few weeks are very sensitive, and within three weeks after fertilization they should be subjected as little as possible to concussions and rough usage. Salmon eggs 22 days old died in 8 or 9 days after being roughly handled during some experiments by the late Dr. Francis Day, the well known British salmon authority, but after the 47th day only very hurtful causes, such as chemical impurities, &c., will do them any harm, and "eyed" eggs are hardy in the extreme. No doubt vast numbers of ova are lost every year at the head waters of salmon rivers by being frozen.

† While galvanized iron is the best material, it must be remembered that the spirits of salt, used in soldering is very hurtful, and new cans, should stand full of water (often renewed) for eight or nine weeks.



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Certainly in 1881, this loss was very severe on many Scottish rivers. The famous physiologist, Dr. Davy, brother of Sir Humphrey Davy, imbedded salmon eggs in ice, and found that they survived; but his experiments provided conditions probably more gradual than the severe and trying circumstances of freezing near the source of a river.

In order to keep the cans suitably cool an outside jacket of iron is often provided, separated by an empty space from the inside can containing the fry. Such double cans are very effective, and being much cooler than ordinary cans, the fry are shipped in them with much greater safety and success. Whitefish fry which are very small and delicate will to the number of 15,000 to 25,000, travel in one of these cans without loss if the journey be not long and trying; but half that quantity of brook trout and salmon would as a rule suffice. Some authorities favour the wise principle of putting a minimum quantity of fry in each can and regard 3,000 to 5,000 as ample, but with newly hatched fry before the gills are properly developed, and before they have acquired their full larval activity and vigour, a greater number can be safely shipped in each can. Ten cans is a full shipment for one team, and fewer cans are in most cases advisable. At the famous Howietoun fish-ponds in Scotland, the lamented Sir James Gibson Maitland, whose recent death all interested in fish culture must deplore, used a conical form of can 24 inches in diameter across the bottom, and  $4\frac{1}{2}$  inches in diameter at the top. The height of this can is 32 inches, and the weight, when filled, about 170 pounds, so that two men could easily lift it about by means of two strong handles fixed at points a little above the centre of gravity (about 14 inches from the bottom). When it is necessary to convey the cans along forest paths or across rocky hills, two poles are horizontally attached to the handles, and the can is then easily carried—one man walking in front and the other behind. Many Scottish lakes situated on the highest altitudes have been successfully stocked by this method.

All fry should be planted immediately after arrival. If the hour of arrival at the planting ground be midnight or during the small hours of the morning so much the better, the atmosphere is then cool. In any case no time should be lost as every moment is of importance, and the sooner the fry are disporting themselves in the clear waters of the stream or creek, the greater is the assurance of success. Under no plea whatever should fry be kept in the cans over the night. Great risk is run by a few hours' delay. If through the impossibility of obtaining a team or other cause it is absolutely impracticable to at once plant them, they should be constantly watched and fresh water splashed in, or the water aerated by a bellows or other means. Aeration is most easily and effectively done by lifting up water in a dipper from the can and letting it fall again with a splash: but on no account should the device be adopted of blowing down a tube into the can with a view to aerating the water. Such an absurd plan has been actually adopted by some manipulators: but in blowing down poisonous air from the lungs, the water in the can already vitiated with carbonic acid gas, becomes more vitiated and poisonous. The surest way of killing and asphyxiating fish suffering from lack of oxygen is to blow air from the mouth into their midst.

Again, fry should not be unduly knocked about or the cans roughly handled. 'Fry will not stand much knocking about,' wrote the late Sir Gibson Maitland... 'the bottom of a tank (or can) used for transporting fry should be stiffened by cross pieces soldered underneath, as, if it sags at all, the fry soon get fatigued, possibly because the least spring from the bottom frightens them and they exhaust their strength by frequent and aimless sallies through the water.' The same author also wrote: 'With care fry can be carried for twenty-four hours, but the result is not satisfactory if the journey be longer.'

Of course small quantities of fry can be sent further and more easily than large. The re-aeration of the water is a difficulty. It cannot be done automatically, as is the case with yearlings, because the motion the water acquires tires out the fry if very young. The cans should never be filled quite to the top: but a considerable space should be left or the fry will suffocate.

Bread crumbs or particles of such supposed food should never be scattered amongst young fish, when being shipped. Very bad results have followed when this has been done as bread is a most unnatural food for young fishes.

It usually suffices in a long journey to change the water at appropriate intervals. The fact is well known that little salmon and trout, only 2 or 3 weeks old, actively wave their pectoral fins to and fro and thus create a current of water which aids in oxygenation, and facilitates the breathing operations of the fish.

The actual planting of the fry is a most important matter, and a good deal of very inappropriate advice has been published upon this matter.

It is clear that fry should not be suddenly transferred from a warm can to a can of water that is several degrees higher in temperature than the lake or stream.

The temperature should be somewhat equalized by mingling the two waters before the fish are emptied out. The temperature of the water into which the fry are to be transferred should not be more than 6° higher or lower than the water in which they have been carried from the hatchery.

It is hardly necessary to say that if fry are being sent some distance to be planted, it is an advantage to have all arrangements for their reception made before hand, so that teams may be waiting the arrival of the cans and an immediate start be made. Before placing the cans on the team it is advisable to remove the ice from the covers of the cans unless the outside atmosphere be very warm. Cans of fish should never stand in the hot rays of the sun: but a cover or sheet should be so placed as to shield them. Cans should also be thoroughly rinsed and cooled with water before fry are placed in them. Fish frequently become sick before leaving the hatchery because this rule has not been observed and the fry placed in cans which have been warmed by the sun or nearness to a stove.

It is a good principle to find out where the fish naturally spawn in the waters to be planted, or if no fish of the same species occur, to ascertain where the best natural conditions exist. Thus whitefish should always be planted on clean gravelly ground in fairly shallow water, or where reefs of honeycomb rocks extend. Brook trout and salmon should be placed near the head of streams or as far up tributaries of large rivers as possible, avoiding, however, those which dry up during the summer.

Lake trout do best if distributed over rocky shoals such as are selected by the parent fish. In such places as those specified there is abundance of shelter, and the small fish, as a rule, make at once for niches in the rocks, or the protection of pebbles and stones. As pike, pickerel and other predacious fish are in the spring occupied in spawning, there is less danger from these fish than is commonly supposed, especially as the first-named species are then in weedy, marshy localities engaged in depositing their eggs. If sunfish, shiners, small suckers and pike appear to abound, it is best to select some other areas which are free from these destructive pests, or if that is not possible, drive these fish away by disturbing the water, sweeping a net over the ground or some such method.

It is often the case that neither time nor circumstances will admit of reaching the best and most appropriate localities, and the planting must be done where it is apparent the young fry would not have been under natural conditions found. After much experience with young fry, I am bound to confess that planting fry upon what may not appear the most suitable grounds results in better success than might have been anticipated. The charge often made against officials of merely dumping in the fry at the most convenient rather than the most suitable places is less grave than might be imagined by the inexperienced. A man standing on shore, with one foot encased in a fisherman's boot, in the water, can pour the fry gently into a deep part near the edge, and the fry will immediately seek shelter. A better plan is to gently empty the fry from a boat and the fry disperse before they reach the bottom. For a few minutes the mass of young fish appear to crowd together and then spread themselves and disappear from sight. That they survive and do well admits of no doubt as the remark, already made, applies in this case, viz., that the chief enemies of the young fish are in swampy shallows engaged in depositing their spawn. In thus favouring the planting of fry in deep water when it is a matter of difficulty to plant them in small batches in shallow water, I have the support of the late Sir Gibson Maitland who wrote: 'At first we used to place the fry in the shallowest water near the inlet of the ponds; but they were so frightened that they used to be huddled together in masses . . . . . when poured into deep water they instantly disperse, and in a few minutes have spread all over the pond in a lively and inquisitive spirit.'



## No. II.—THE PROPAGATION AND PLANTING OF PREDACEOUS FISH.

BY PROFESSOR E. E. PRINCE, COMMISSIONER OF FISHERIES, OTTAWA.

The science of artificial fish-culture primarily confined its operations to restocking depleted waters. Salmon rivers were planted with salmon, trout-streams were restocked with trout, and the Great Lakes were re-populated with the young of the lake white-fish. There appeared to be some guarantee that the fry distributed from the hatcheries would have every chance of survival, because they were placed in waters where the conditions were appropriate. They were, in other words, planted in the waters to which they were native, and where their food and environment would be favourable and normal. It was not long before enterprising fish-culturists ventured to advance beyond these narrow limits. It was suggested that young fish might be introduced into waters to which they were not indigenous, and curiously enough some of the earliest experiments in the transplanting of fish were the boldest, and apparently the most hazardous to attempt. Trout and salmon from British waters were, in fact, sent to the Antipodes. No trout or salmon occurred originally in the rivers and lakes of Australia or of New Zealand, and not a few fish-authorities regarded as perilous if not hopeless, the proposal to place the brown trout of England, and the salmon of North Britain, in the waters of the southern hemisphere. Nearly forty years have passed since these initial shipments of British fish took place and the results are well known. The salmon for some reason appear to have failed to establish themselves, and the theory is that, if the young fish survived after being distributed, they went down to the sea as smolts and never returned. With the trout it proved wholly different, and the success of the experiment exceeded the most sanguine expectations. A great proportion of the fish descended to the sea and became sea-trout, but sea-trout far surpassing their brethren of the northern hemisphere. The British brook or river-trout ranges in weight from a few ounces to two or more pounds. Larger fish are recorded, but they are abnormal. Sea-trout reach a somewhat larger size, and on an average may be double the weight of their fresh-water congeners. But in Antipodean waters the progeny of the small English trout planted in the 'sixties' have grown to gigantic proportions, and huge specimens have been repeatedly captured approaching a weight of thirty pounds. The transplantation of fish from their native surroundings to waters entirely new to them was not only a successful experiment, it was a triumph in the history of artificial fish-culture. To this successful trial may be compared the introduction of the brook trout or North American char of Canada and the United States into English and Scotch waters where it has also turned out well. The gaily tinted *Salvelinus fontinalis* is now a familiar fish to British anglers and fish-culturists. The species has suffered no deterioration by being transported to waters across the Atlantic. Other cases might be referred to. Thus Pacific species of various kinds have been transferred to the Atlantic slope, and every effort made to establish them there, while on the other hand, extensive shipments of Eastern species have been made to Western lakes and rivers, both in the United States and in Canada. The experiment of planting Pacific salmon in rivers debouching into the Atlantic has not been demonstrated to have been a success. Stray specimens of salmon have, it is true, been captured in eastern rivers: but no marked results have been recorded. Atlantic shad, striped bass, river catfish, &c., planted in western waters on this continent have, however, prospered, and there is every sign that the step taken will prove eminently successful.

While artificial transplantation of fish proves in most cases not only a success; but a very real benefit to the territories whose waters may be stocked with new and useful varieties, yet there are dangers, and very real ones, which cannot be ignored, and unless some regard be had to the safe limits, within which this branch of fish-culture may be beneficially carried on, more harm than good may be done, and evils created which it will be well-nigh impossible to counteract and remove. This warning is specially

urgent and necessary in the case of predaceous species. As a rule such fishes are sturdy native and wandering kinds, well armed both as to spinous fins and formidable teeth and, in the contest with species less pugnacious and strong, they readily gain the upper hand, when introduced into new surroundings. Under normal conditions in their native waters, they are kept in check, or in most cases they do not frequent precisely the same areas as the more defenceless kinds. But if the balance of things be unduly disturbed, such rapacious species even in their native waters, will be found to unduly increase, and may over-run vast areas to the injury and, it may be, extermination of less predaceous and usually more valuable fish. On the other hand a species of fish may be introduced into a new habitat, which may be unfavourable for its growth and numerical increase, if not actually inimical to its very existence. This is not realized by many persons, who are filled with enthusiasm to have all available waters stocked with it regard to the essential conditions of success. The experience of all fish-culturists, especially government experts, confirms this. A distinguished U.S. expert, lately deceased, once plainly stated his experience as follows: "I have seen very many applications asking for brook, brown and rainbow trout fry and brook, brown, and rainbow trout fingerlings, all on the same application and all desired for the same stream or pond. The eternal fitness of things is not in the least considered. A man is advised not to plant brown trout in waters already containing the native brook trout, and he replies that he has already done so. I think I can point to fifty cases of this sort. There will come a time when some one must answer for the indiscriminate stocking that has been done. That a man asks for a certain kind of fish for certain waters that are entirely unsuitable for the fish, is no reason why the man should have them merely because he is a citizen and a taxpayer and the fish are free. A chemist would not sell a man active poison simply because the man was ignorant of the results from using it and had been impressed with the name and so fancied it for his system, but an honest chemist would recommend horehound candy instead of the prussic acid the man thought he wanted. The Commission has a letter on file from a man whose application was not filled. He said he was entitled to the fish and would have them or know the reason why, with other intemperate language. He was told the reason why—that no man was entitled to any fish until his application had been passed upon by the Commission, then if the waters were suitable for the fish and the state had them for distribution, the fish were sent, not to the individual, but for the benefit of the general public who fished the water."

In unsuitable places where the fish do not actually perish, they may be dwarfed and lead a lingering existence. When in 1882 a quantity of the famous Loch Leven trout were transferred from their native lake, on the borders of Fife and Kinross, in Scotland, to the beautiful Highland loch, Loch Ard, by the Scottish Trout Preservation Association, it was found three years later by Mr. D. B. Macgregor, of Glasgow, that specimens were being caught, but their weight was not more than five ounces, whereas this species of trout normally reach double that weight, or even twelve or fourteen ounces in the favourable waters of Loch Leven. Mr. Macgregor in reporting on the matter attributed the dwarfing influence in Loch Ard, to the scarcity, or the difference in kind, of the food. Of course, it is impossible to foresee what results may follow the introduction into new waters of a strange or a foreign species. The acclimatization of animals (beasts, birds, and fishes) has yielded most unexpected results in many cases. The rabbit-plague in Australia, and Cape Colony, South Africa, for instance, the enormous increase of the European house-sparrow in North America, and the results (most harmful) of the liberation of English starlings in certain portions of the United States Republic, afford sufficient warning as to the unwisdom and riskiness, not to say widespread harm of the transplanting of species of living creatures from their native surroundings into new areas, without adequate knowledge or experience of the possible results. Some countries, alive to their best interests have taken effective steps to undo and counteract the evil; but preventive and corrective measure should be adopted in our own and other lands. The action of Cape Colony and Western Australia on the question stands out in marked contrast to the apathy of other countries. Cape Colony, in 1890, made it unlawful to introduce rabbits, either by land or sea, or to turn them loose within the colony; required the rabbits already in the colony to be confined in hutches or boxes constructed according to certain prescribed regulations, and authorized



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any one to destroy rabbits found on his premises, Crown lands, or along public roads. Western Australia, profiting by the experience of her sister colonies on the eastern side of the continent, has taken measures to secure protection from the evils of indiscriminate and ill-advised acclimatization by the passage of the so-called "Destructive birds and animals Act."

The difficulties of coping with the rabbit plague in Australia were graphically explained by Mr. W. D. Severn in an address at the Imperial Institute, London, two or three years ago. He pointed out that three pairs of rabbits were originally introduced and they soon threatened to turn the country into a gigantic rabbit warren, a single pair it had been found resulting in a progeny of over 13,000,000 rabbits in the short period of three years. Fencing, poison, digging burrows, and driving the animals into limited areas were adopted at enormous expense; but the use of arsenic seemed to be most effectual. Sir Samuel Baker, on the same occasion, referred to the reward of \$125,000 offered by New South Wales in 1887 for a reliable remedy, and no less than 1,800 schemes were submitted, and the plan was adopted of enclosing, in a fence 15,000 miles long, the rabbits near a supply of water which was poisoned, and they were now being reduced in numbers.

It is not necessary to make any lengthy reference to the introduction into the waters of this continent of German Carp for the reason that six years ago I expressed pretty fully my views upon the matter. (See Special Report 'The Place of Carp in Fish-Culture,' Mar. & Fish. Report, Ottawa, 1896.)

While opinions seem to be divided as to the evil or the good resulting from carp-culture, it must be confessed that they have spread far beyond the limits anticipated by those who initiated the stocking operation. The fish have spread over a wide area, and have invaded Canadian waters far from the sites in the United States where they were originally planted. I have been repeatedly assured by Canadian fishermen that the large catches, which they unwillingly take in their nets, cannot be readily or profitably disposed of. In a single haul no less than 2 tons of carp, weighing 4 or 5 lbs. to 18 lbs. each, have been taken by a pound-net in Lake Erie, whereas not more than 15 to 20 tons of the valuable whitefish would be secured by a fisherman in the whole season (April to October). The fishermen claimed that all Lake Erie had been over-run by carp planted in Sandusky Bay in 1888. Commander John Brice, soon after he received the appointment in 1896 of U.S. Fish Commissioner, publicly stated his opinion on the matter of planting carp and on the policy of fish-planting which he favoured. He said:—

'There is no reason, therefore, why the streams of the United States should not be full of fish of the species either natural to their waters, or which have become acclimated to such a degree that they flourish as though they were native to them.

'We do not propose to introduce fish in a stream without a full investigation as to its characteristics and the effect it will have on the natural denizens of such waters.'

'Now, take your Potomac River, for instance, as a case in point to illustrate what I mean. A few years ago the Potomac was full of black bass from above Cabin John Bridge to its head waters, and fishermen enjoyed magnificent sport all along it. Now there is general complaint about the scarcity of the bass in the Potomac. This change is due to no other cause than the carp. The carp is a natural scavenger, and he destroys the spawn of a fish wherever he can find it. The carp follows the schools to their spawning beds and sucks up nest after nest without fear of interruption, because he is too big and unwieldy for the fish he pursues to drive him away. There will be no more carp distributed by the United States Fish Commission while I am in charge of it, and they will be cleaned out of all the ponds wherever they may be that come under the authority of this office.'

Quite recently the Attorney General of Indiana announced that a law for exterminating carp had been enacted and the fishery officials duly notified. The Fish Commissioner asked the Attorney General if he could have the lakes in northern Indiana seined and kill the carp, gar and mud turtles, which are found in those lakes by the thousands and which kill the kind of fish that the State desires to foster.

Attorney General Taylor's recommendation is that an immense seine, probably 1,000 feet long, be procured and all the smaller lakes be seined. When the seines are hauled in the carp, gar and mud turtles will be killed, but the bass, perch and other fish

brought up in the seine will be immediately thrown back in the water. Mr. Taylor believes this will do more to preserve game fish than any one thing that could be done. The Moon Railroad Company will seine Cedar lake in a short time and will kill all the carp, gar and turtles brought up in the seine. The work will be done under the direction of the commissioner.

The policy adopted, for a period of many years in fish-culture operations in the Dominion has been on wise and cautious lines. A well-informed policy, confining the work mainly to the hatching and planting of salmon, lake whitefish, and great lake trout, the last frequently called salmon-trout, has been uniformly pursued, and the policy has proved beneficial and safe.

Of course many species have been constantly pressed upon the Government's attention; but most of the fish recommended being more or less predaceous, some of them extremely so, it has been felt that even at the risk of disappointing the public, the propagation and planting of these kinds was hazardous, and might result in infinite harm.

There can of course be little risk in the planting of salmon if the conditions are favourable. As a rule a salmon-river is not perfectly adapted for other fish, unless it be sea-trout and brook-trout, and in certain cases sturgeon and striped bass. Cusk or fresh-water ling and togue or touladi occur in such rivers as the St. John River, New Brunswick; but, on the whole, the salmon is the predominant fish in our Canadian salmon rivers, and efforts to keep up and to increase the supply of those noble fish by means of hatcheries, must be an unmixed benefit if properly and successfully carried out. The planting of lake-whitefish fry involves no danger to other species. Its habits are inoffensive, it is toothless and subsists chiefly on small crustaceans, mollusks, and similar minute food. It is stated to devour small fish, such as young gold-eyes and fresh-water clupeoids in Lake Winnipeg and other great-lakes, but such predacity is unusual. There is not the same certainty about the great lake trout. It is a powerful and voracious fish, well armed with strong teeth, and a most formidable foe to all smaller fish, if planted in confined waters. In the great lakes of Canada, the trout during most months of the year frequent the deeper waters, and only move into the inshore shallows about spawning time, i.e. late October or early November. During the spring and summer its habits and the nature of its food keep it in regions not frequented by whitefish, hence these two important marketable fishes have co-existed in Canadian waters generally. Both fishes spawn in the fall, and in many localities they have been taken together in the same nets, the two species at this time being more or less in company, though as a rule whitefish do not spawn on precisely the same grounds as the great lake-trout. It may also be added that during the spawning period neither of these fish take much food, indeed the condition of the stomach indicates that they fast at that time, hence there is little danger then to the inoffensive whitefish from the proximity of the hordes of voracious lake-trout.

The maintenance of the balance between predaceous and non-predaceous kinds of fishes depends, no doubt, upon a variety of causes. I have indicated one, viz., the different habitats frequented by various species in the same waters, but others might be named. When, however, this balance is disturbed, as in the great lakes, by fishing operations on a vast scale the results are frequently quite inexplicable. Thus the decline of the lake whitefish fishery in Lake Erie has been followed, not by a great increase in such predaceous species as the blue and yellow pike-perch or pickerel (doré), but by an enormous increase in the takes of so-called lake-herring or lesser whitefish, a species of inferior edible qualities and of less market-value. In Georgian Bay, and the waters of Lake Huron generally, the diminished supply of whitefish seems to have been accompanied by a very appreciable increase in the quantity of great lake-trout. In Lake Ontario twenty years ago the whitefish ranked as of first importance in quantity and market value, the lesser whitefish (called lake-herring) ranked next, and the lake trout came third, followed by the pickerel or doré and by the long-nosed pike (*Lucius*) or grass pike.

Now, however, the inferior, or lesser whitefish (so-called herring) and the grass pike are of chief market importance, the pickerel or doré ranks next, and the whitefish and lake-trout are of comparatively insignificant moment. It is extremely probable that



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physical changes in the character of the great lakes, and the surrounding country, have been potent in bringing about these results; deforestation no doubt working vast changes, and the extensive use of the deadly drag-seine on the shallow spawning beds hastening the deterioration; but at the same time, it is not easy, from a biological point of view, to see why a smaller and inferior species of whitefish should survive, along with voracious species like the grass-pike, when the larger and more valued kind of whitefish has declined in quantity to so serious an extent.

It requires no argument or production of elaborate evidence to demonstrate that a weaker species is bound to succumb in the struggle for existence with a stronger and more voracious species. Nevertheless fish-culturists are continually urged to try the risky experiment of planting the weaker and more inoffensive kinds of fish in waters abounding in powerful and predaceous fish, and to thus add to the unequal nature of the struggle. The authorities charged with the task of framing fishery regulations are persistently pressed to afford increased protection to the latter. Thus in the waters of Lake Huron and Georgian Bay while the valuable whitefish has decreased in abundance for a number of years, the smaller and less valuable kinds have not done so, and the great lake-trout has apparently shown an improvement in numbers, and this last-named fact is the more remarkable because the present close season. 1st to 30th November, is admitted to cover only part of the spawning period. The International Commissioners in 1896 were struck by this noteworthy state of things. They say (pp. 108 and 109 of their report):—

‘There has been a vast decrease in the abundance of the whitefish in Lake Huron, and this decrease has continued unchecked to the present time, the same being due to a complication of circumstances. The location of the most extensive fishery for this species has varied from time to time, and it is significant that during any given period of which we have knowledge, the region of the greatest fishery, whether by gill nets or pound nets, has been the region of greatest decrease.

‘It is impossible to say whether or not the amount of apparatus alone, unaccompanied by other abuses, would have induced the decrease noted. There is no doubt that considerable harm is done by the capture of small whitefish in the pounds, and perhaps to some extent in the gill-nets fished ostensibly for menominees. Along the north shore on both sides of the boundary line the catch of small whitefish of inferior value to the fisherman, but of vast consequence to the fishery, is an evil of the pound-net fishery which requires correction.

‘A considerable proportion of all the whitefish taken in the lake are caught during the spawning time, when they are close inshore and readily accessible, and the facility with which they may be taken at such times is probably, to some extent, responsible for their decrease.

‘During the period for which we were able to acquire information there appears to have been but little decrease in the trout. The large shoal-water variety caught in the fall has apparently fallen off to some extent, but the deep-water form exists in apparently undiminished numbers. The immunity of this species from the effects of the various agencies which have decimated the whitefish is, no doubt, due to its habits and distribution. It is less gregarious than the whitefish, and, instead of being confined to the coastal-platform, it has a lake-wide distribution and an apparently wide individual range of movement. It apparently seeks its food at all depths and finds it in considerable variety and is, therefore, not much affected by the pollution of the bottom. Although the gill-net fishery for this species is quite extensive, we have failed to note any serious effect upon its abundance. Young fish are sometimes caught in the gill-nets, but as they usually become entangled by the teeth no remedy suggests itself.’

Many fishermen before a Commission, which sat in 1892, gave similar views. Thus Mr. Hutchins, of Midland, Ont., informed the commissioners that ‘whitefish are the most valuable fish in the Georgian Bay—that is for the fishermen—and should be husbanded more than any other, for they can be destroyed more quickly than any of the other kinds of fish by reason of their innocent nature: they are not greedy or voracious, while salmon-trout feed largely upon them.’

In my report already referred to (32nd Ann. Rep. of Dept. of Mar. and Fisheries, p. lxxvi), I drew attention to this matter and pointed out that ‘the great lake-trout is

a strong predaceous and, in some respects, undesirable fish, making war upon whitefish and all other kinds. . . . . The present close season for the great lake trout is perhaps too short, but it has sufficed in Lake Huron and Georgian Bay, at any rate, to ensure the maintenance of a fair supply of these fish. It is plain that predaceous species call for less protection than more harmless and defenceless species.'

The general conclusion to be drawn from all these observations is that a knowledge of the habits of fish, of their ability to accommodate themselves to their surroundings and hold their own against other species, is essential in carrying out a system of planting young fish and of stocking new waters. Hardly less important, perhaps even more important, is a knowledge of the probable increase and predominating power of a particular kind of fish introduced, or about to be introduced, into waters to which they are not native. There is grave danger in this work of transplantation unless it be done with a full knowledge of the facts and possibilities of the case. Serious harm may ensue—harm which may be irremediable—unless caution and discretion, based upon accurate knowledge, be exercised. At one time fish-culturists of prominence and authority were eager to introduce every possible kind of fish into all available waters. Western lakes and rivers were to be stocked with eastern fish, and *vice versa*, while a great variety of fishes from Britain, Germany, France, Austria and other countries, were to be introduced into the waters of this continent; also, as part of the scheme, North American species were to be shipped for planting purposes in return. Such hasty and ill-considered proposals were likely to do more harm than good. Thus, our American catfishes, excellent though they may be for certain table purposes, are altogether undesirable in waters fitted for superior game and commercial species. The German carp, welcome no doubt to Germans and Austrians, who in their native lands never knew any better fish, is out of place in the crystal waters of Canada, and the tench, barbel, bream and other fishes, native to Britain, are altogether undesirable in the waters of this western continent. But the objection to these fishes is not that they would devour or drive out our more desirable native fishes, but that they are not worth the room they would occupy in our waters, and the food which they would devour is required to sustain and nourish the fry of native American species. The same objection does not appear to have so much force when applied to the case of fishes with desirable qualities. Yet the policy adhered to by the Dominion Government even in regard to such fish has been a wise one. No encouragement has been given to proposals to hatch and stock Canadian waters with fish from Europe. The English river-trout, often called brown trout, is a case in point. But that the policy we have followed is wise is clear from the change in the views of the principal United States officers charged with the work of Federal Fish Culture. Thus Commissioner Brice, in a published interview, said:—"We do not propose to introduce any more foreign fish in American waters. There is some demand for the introduction of the German trout in this country, but the persons who desire such an importation apparently do not realize what an effect the appearance of this fish would have upon our native varieties. The German trout is stronger, larger, more vigorous and vicious, and grows faster than any of our variety, and if it were introduced into this country it would quickly drive out the brook-trout in the East and the rainbow-trout in California. 'No,' continued Commissioner Brice, 'the care and preservation and increase of the fishes indigenous to American streams, or which have been found to adapt themselves to our waters without driving out or destroying the native varieties, should be the aim and object of the Fish Commission.'

Hence a comparatively small number of trout will thrive, as just remarked, in a lake which will sustain a disproportionately larger number of whitefish. There are lakes in Alberta, Assiniboia and Saskatchewan which at present yield an abundant supply of delicious whitefish to the settlers, and Indians and Half-breeds; but that supply would not only be endangered, it would inevitably disappear were brook-trout, commonly called speckled-trout in eastern waters, introduced. Fine salmon rivers along the Atlantic coast have, in many cases, suffered from trout, both the fresh-water and the sea-run variety. Indeed in the provinces of Quebec, New Brunswick and Prince Edward Island, some rivers have been so seriously overrun that the diminution of salmon in them may be largely traced to the excessive number of trout. It was actually urged a few years ago that the use of dynamite (prohibited by statute) should



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be permitted for the express purpose of diminishing the hordes of trout which in some pools had become superabundant. Had that extreme step been sanctioned by the Dominion Government, no doubt the trout would have been reduced in numbers; but such immense quantities of salmon, young and old, would have been killed that the harm might not have been repaired for many years. Reputable persons held, however, that in the long run the river would have been benefited. The usual food of the trout is aquatic larvæ, beetles, flies and small fish; but it is a most inveterate destroyer of salmon eggs and fry. When these are not to be had it will attack even larger fish. The serious decrease in the supply of the beautiful and valued grayling in the State of Michigan has been attributed largely to brook-trout. The *New York Forest and Stream* (July 1901, p. 278) said upon this matter:—

'The Michigan graylings are now only found in the upper waters of a few of the streams of that State, and are, sad to say, rapidly being exterminated. They apparently cannot withstand the inroad of the brook and the rainbow-trout, which are quickly taking possession of the once fruitful grayling waters of Michigan. The angling tourist will still find them in upper Manistee and in Ausable River of the State named.'

When insect food, or even the young or the mature stages of other fish are not to be readily had, the trout turns cannibal, and devours the eggs and young of its own species. As Mr. S. H. Campbell said in his official report for 1901, on the State Fish Hatchery, Wyoming:—'The trout is the most destructive fish to its kind, in the matter of destroying its eggs during the spawning season. While on the spawning beds hundreds of trout are gathered, male and female, and devour the eggs as fast as they are deposited on the gravel and bottom of the stream or lake. It is only the eggs that are covered or fall among the rocks that ever hatch out from natural reproduction. It is not the other kinds of fish, such as suckers, chub and dace, that destroy so many of the trout eggs; but it is the trout themselves.'

Species which for market or for sport are of highest value to the community have been hatched under the auspices of the Dominion Government, and dangerous or doubtful species have been excluded. Amongst the species which have rarely, or not at all, been included in Canadian fish-culture, but which correspondents have persistently recommended for inclusion are:—Canadian brook-trout, rainbow-trout, black bass of both species, sturgeon, yellow perch, cat-fish, pike, maskinonge and other kinds.

Let us take the brook-trout first, for in the opinion of most people it is a fish which can be regarded as out of place in no lake, river, or stream. It is a mistake to introduce brook-trout into lakes in which whitefish are abundant, unless such lakes be of great extent, and contain considerable depths.

In our North-west Territories, where fish have a very special value, a value hardly to be paralleled in other provinces less remote from the sea-coast or great lakes, a small lake stocked with whitefish is of far more importance than if stocked with trout. Not only will the same area of water furnish a greater amount of fish-food (if whitefish are planted not trout) but trout are predaceous, whereas whitefish are not. Trout devour other species, and even make war upon each other. It is no doubt impossible in most salmon rivers to exterminate the trout, or prevent their inroads; but every means should be taken to keep their numbers down and successfully check their superabundance. A salmon river should, as far as possible, be a river for salmon, and no step should be neglected to make it so. On the other hand a trout stream is not to be despised; but a trout stream should be a stream for trout, a stream that is to say, in which every encouragement for their increase and welfare, and every protection against injury and depletion is afforded them. It is justifiable in a good trout stream to exclude and destroy salmon for, as that most enthusiastic of trout culturists, the late Sir James Gibson Maitland once declared,—'trout are most destructive to salmon spawn, and salmon in their turn are, after spawning, most destructive to trout.'

Closely connected with the brook-trout *versus* salmon question, and the incompatibility of cultivating both in the same waters, is the frequently suggested plan of stocking speckled-trout lakes and streams with the justly esteemed rainbow-trout of the Pacific slope. In this case again the choice between a familiar and valued native fish and a much vaunted stranger arises. No doubt the rainbow-trout is a hardy, hand-

some and fast-growing fish. As a game fish in its native waters it could not be surpassed, though it is alleged that when planted in eastern waters it becomes languid and inactive, and grows large and fat and lazy in its new surroundings. My own opinion always has been that our eastern brook-trout is the best fish for eastern waters, and that every effort should be made to increase its numbers, and prevent the continuance of that depletion in the streams of the Maritime Provinces which must soon result in extermination. There are hundreds of streams, not naturally adapted for salmon which would well repay restocking, and more active protection. Such streams no doubt might be stocked with rainbow-trout. The suggestion has, indeed, been repeatedly made, and in one of our Dominion hatcheries rainbow-trout purchased at the Caledonia establishment, N.Y., have been hatched and planted in certain Nova Scotia waters. But I am strongly of opinion that the native brook-trout are to be preferred, and in this opinion I find myself confirmed by the views of a most able and accomplished fish-culturist, Mr. Alfred Ogden, the Dominion officer in charge of the Bedford Salmon Hatchery, near Halifax, N.S., who says (in his 1899 report):—

‘Although the rainbow-trout is a good game fish, an active biter and makes a strong fight, giving great sport to the angler, I think that it would be a great mistake to introduce it into waters where our native trout ab unds. Where food is plentiful, and waters moderately cool, the rainbows will grow fast and attain a weight of from 5 lbs. to 10 lbs., and will no doubt soon destroy the native trout of smaller size. The rainbow-trout are not as fine a fish for food as our native species, and the flesh will not keep long after being taken out of the water.’

I am of opinion that the Pacific trout will be found to destroy both the eggs and young of the eastern trout; but that remains to be proved. Their rapid growth and attainment of a disproportionate size in a comparatively short time supports the idea that the native trout will not be able to hold their own against the introduced stranger. How important, then, it is to have more information and to use extreme caution before sanctioning attempts to stock our eastern waters generally with the voracious and quick-growing western species.

A few words upon the stocking of new waters with the justly esteemed black bass, are highly important when dealing with this subject of the planting of predaceous fish. The black bass of both species are typically predaceous fish. The reputation which they have enjoyed as game fish is well-justified, and many experienced anglers go so far as to compare the landing of a large black bass, of the small-mouthed species, to the landing of a salmon. They are most muscular and powerful, and not easily played out, fighting to the last. The traditions of sport forbid this comparison of salmon and bass fishing; but I was assured, a few years ago, by a high government official from England, who was spending a holiday in Canada, that a week's black bass angling in the Gatineau waters, north of the city of Ottawa, had given him more enjoyable and exciting sport than he had experienced in English or Norwegian salmon rivers. From its very voracity the black bass is a bold and fierce biter. The angler need rarely be disappointed of a ‘rise’ if there be any black bass about. It needs some skill to strike at the right moment, and still more skill and wrist endurance to sustain the fight, with the vigorous and untiring victim, which possesses all the cunning and activity, and almost the strength of a fresh-run salmon. The comparison of the bass with the trout is more permissible perhaps than that just referred to. One of the best known anglers of Pennsylvania makes this comparison, and points out how the two fish differ. He said that to play a speckled-trout gave him a higher and keener sense of delight than to hook and play a lordly black bass. ‘Both,’ he said ‘make a glorious and intelligent struggle for life. But there the comparison ends. The trout fights like a trained boxer, the other like a savage. One arouses all my admiration and the other my blood. With one I feel as though I was engaged in a friendly contest, with the other almost as though it was the life of either myself or the bass.’

There is a lack of refinement about bass fishing, which marks it off at any rate from the traditional stately conflict with that monarch of the river, the salmon.

Waters, in which black bass abound are to be coveted; but these fish should not be desired or planted everywhere. Brook-trout without question will inevitably disappear before the new and pugnacious marauders, and in most cases the trout are the preferable fish. As a matter of fact a lake will sustain far fewer bass than brook-trout,



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for the reason that the bass are inordinate feeders, and are on the offensive at all times, though especially bellicose in June and July when in most localities they are at the height of spawning, or jealously guarding their nests. Moreover the schools of young fry are great wanderers, and will make their way into all the neighbouring waters, if access be at all possible, passing through very small and shallow channels, when foraging for new feeding grounds. Waters should be well supplied with numerous and small cyprinoids in order to satisfy the voracious appetites of the bass as they are especially liable to parasites and disease if allowed to get into poor condition, and not supplied with ample substance. Ponds, though abounding in insect and crustacean life, will not keep bass in health and vigour. They must have live fish and if possible frogs and such large 'game' for food.

At one of the United States hatcheries (Neoshosta, Miss.) five or six years ago, it was found in rearing bass and brook trout in ponds that there was a very serious loss, for which it was difficult to account, considering the expert care afforded to the brood. It was pointed out in a published report that the 'net output of the basses and trout was very discouraging in view of the fact that these fish were carefully assorted each month and the different sizes kept separate. The loss of the bass was undoubtedly due to cannibalism, though enormous quantities of *Coriza* were collected as food for them. This food is very acceptable to the rock bass, but the black bass have been observed to eat each other when the bottom of the pond was covered with young *Coriza*. In view of these losses it is strongly recommended that the distribution hereafter be made during the months of September and October, as it is believed that a much larger percentage of the fish can be saved by so doing. In addition to this better results can be obtained by planting fish in the early fall, when the water is full of natural food.' Bass indeed are found as a rule to absolutely refuse food other than small living fishes.

Some interesting details are given in the U. S. Fish Commissioner's Report for 1898 (Washington, 1899,) on experiences in the artificial feeding of various species of fishes exhibited in the glass tanks at the Tennessee Centennial Exhibition at Nashville. Beef, liver, shell-fish and other animal matters were tried, the beef being carefully divested of the fat and sinews, and cut into small fragments suited to the various fishes. 'For the small specimens' said Dr. Ravenel, 'it was ground down fine in a meat-chopper while for the larger it was cut in pieces of varying size . . . . the black bass and crappie, which were the most difficult to keep, were fed entirely on minnows.'

There are lakes containing only small inferior species of fish, or containing no fish: but capable of being supplied with so-called 'minnows' and into such waters black bass might be introduced. There are lakes and channels, peopled only with pike and coarse predaceous species, which are equally suitable: but the utmost care is desirable lest, after the bass have established themselves, they find too ready access to neighbouring waters and overrun regions occupied by brook trout, grayling, or other desirable kinds of fish. With this proviso that the conditions as a whole are understood, and all possibilities of danger recognized and guarded against, there is really nothing to be said against the view which the Marquis of Exeter expressed on June 21st, 1883, at the London Fisheries Conference. On that occasion the Marquis said that he felt bound to utter 'a word in defence of the poor black bass, which had been so hardly used. He fully agreed with the remark that they should not be put into trout streams, where they would be as destructive as pike, but in many parts of England, particularly in his own county, there were neither salmon nor trout in the streams, only pike, perch, and the most abominable of all fish, coarse bream. In those waters the black bass would be a useful addition, he would rise to a fly; he would take any bait; he would live with the pike, and he was exceedingly good eating. They contained very few bones, and he thought the flesh was decidedly more like fresh whiting than any other fish.'

Still more care and caution require to be exercised respecting the planting of maskinonge. It is true that this huge half-brother of the long-nosed pike (*Lucius*) is in some respects less wolfish, more gamey, and a far superior fish for table purposes: but he is essentially a pike, and can only be introduced into waters which are peopled by fish equally active, well-armed and predaceous. Similarly, the pike-perch or pickerel of Canada, for which requests are continually being received in Ottawa, is a most undesirable fish where trout, whitefish or similar species are being protected and cultivated. I

fully agree with the opinions of a correspondent in *Forest and Stream*, N. Y. (April 21st, 1900) who affirms that 'every angler knows the nature of the food of the adult muscalonge and also knows that it is a fish of the cold Northern waters. It is certainly one of the most voracious fishes known, and in habits is to be closely compared with its congener, the wall-eyed pike or pike-perch (*Stizostedion*). Such fishes are the wolves of the waters, and their introduction should be attempted with great care and knowledge of the waters into which they are to be placed. Where they become abundant they effectually kill off nearly all other kinds of fishes in the waters they inhabit, especially if it be an isolated pond or lake where other fishes do not freely migrate into it. If such pond or lake contains only the coarser or less valuable forms of fishes, it may be well to stock it with muscalonge and wall-eyed pike, but if fine fish or other desirable game fish are abundant, it is certainly advisable to prevent these wolves beneath the waters from exterminating more valuable forms of life. Here again is decided need of biological investigations to determine what waters should be and what should not be stocked with such fish.'

Of pike, suckers, perch, catfish and similar coarse predaceous fish little need be said. There may be occasionally muddy ponds or isolated lakes where these fish could be safely planted without risk of their overrunning the whole of the waters of the adjacent district: but it may be laid down as a general rule that these fish do not need the aid of artificial fish-culture and they should be kept as far as possible within their present range. To introduce them into virgin waters where they will soon inevitably hold supreme sway, outnumbering and overcoming in an incredibly short space of time the indigenous kinds of fish, is criminal. Well might an eminent U. S. fish-culturist declare, a year or two ago:—

'There will be no wall-eyed pike distributed. We have received many requests for fish of this character under different names from various parts of the country, but they are all wall-eyed pike, pure and simple, a most pernicious and destructive fish, and, as I said, none will be distributed. The perch is another destructive fish. There are very few members of the perch family that do not come under this condemnatory head. Like the carp, they follow the schools of fish and destroy their spawn.' The damage done by unwise planting of fish it may never be possible to undo. A recent private letter received by me, from a well-known gentleman in the province of Quebec, indicates how seriously such a fish as the yellow perch may affect fine angling lakes,— 'I own "he says" a lake in the County of Portneuf in which, some years ago, nothing but trout could be found; to-day, however, the only fish found there are perch.' In some Canadian lakes the yellow perch, formerly unknown or not occurring numerously, has increased so vastly as to endanger all other fishing. The Pennsylvania fishery authorities were the first to point out, some years ago, that the yellow perch, in even so large a body of water as Lake Erie, were becoming a menace. Curiously enough as they increased in the greater waters, they were observed to become scarce in the smaller lakes and streams—to quote from their report.—'While yellow perch are becoming scarce or have disappeared in some of the streams and ponds through the thoughtlessness of anglers and boys, and the ravages of pot hunters and criminals, the fish seem to be actually on the increase in Lake Erie and in the other great chain of inland seas of which it is one. To such a surprising extent is this true, that a large number of the lake fishermen became firmly convinced that the Fish Commissioners of this and other states, as well as of the United States government, had confounded the identity of the yellow perch and the whitefish, and had taken to hatching and depositing the fry of the former in the waters instead of the latter.'

The spawn of the perch is one of the best adapted for accidental transportation from one lake or river to another, and, while in many cases the regrettable step has been taken of actually depositing spawn or fry in new locations, there are no doubt multitudes of cases in which waters have been stocked by birds, especially ducks and other aquatic species. The spawn of the perch is arranged in long tenacious ropes or frills, and being laid in shallow water, becomes readily entangled in the feet or feathers of water-frequenting animals. When yellow perch establish themselves, they soon dominate the whole of the locality, and are most difficult if not impossible to exterminate. A newspaper published at Sturgeon Bay, Wisconsin, recently stated that 'twenty tons was about the



amount of perch that was taken in this bay during the past season. At an average of one cent a pound the dealers have paid out \$1,000 on this account. Despite this enormous catch from year to year, there appears to be no perceptible diminution of the perch in these waters, but they appear to be as numerous as ever.' Lake Memphramagog was over-run with perch a few years after they were planted by persons in Vermont though the salmon trout devoured them, seven or eight perch being taken out of the stomach of a large trout.

The power of successfully maintaining their numbers in the contest with other species, is very marked in many kinds of fish, and it is necessary to take this into account, when framing protective regulations, as I have pointed out elsewhere (See Report of Marine and Fisheries Department—1899—p. lxxvi). Commercial fishermen have felt the force of this view, and on many occasions during the sittings arranged by the Dominion Government for the special Ontario Fish Commission, which took evidence all along the great lakes, in November and December, 1892, prominent fishermen gave expression to this sentiment, that much legal protection is not necessary in the case of some of the predaceous fish above named, and that their undue increase has resulted in the depletion of more valued and more desirable species. The opinion expressed by Mr. W. W. Church, of Midland, a fisherman of over 40 years experience, may be taken as typical. He told the commissioners that—'Whitefish were more numerous in Lake Ontario than any other kind of fish. Pike, pickerel, bass and trout, eat young fish, and some kinds of fish destroy the spawn. Whitefish nevertheless, held their own in the old days of fishing and salmon-trout were plentiful at the same time. When whitefish dropped off, salmon-trout were gone into more fully, and then they likewise dropped off. It would be a benefit if pike and pickerel, bass, eelpouts and dogfish were taken out—it would benefit the whitefish.'

The International Commissioners (Dr. Wakeham and Mr. Rathbun) four years later, found the same opinion prevalent in certain fishing localities, and on p. 79 of their report, referring especially to the pickerel or doré, (otherwise sauger or wall-eyed pike), they remarked that 'the policy of affording any measure of protection to the wall-eyed pike and its related species the sauger, has been strongly deprecated by many fishermen because of their well-known predaceous habits, and it is even claimed that the catching off of these forms in Lake Erie has produced an increase in the supply of herring.' While the Commissioners did not feel able to accept the conclusion reached by the fishermen, they placed on record the fact that the pickerel (blue and yellow) are very destructive to other fish. From their own examination of specimens they state that 'the species seems almost entirely piscivorous. Of many examples examined, nearly all contained some fishes of some kind or other and scarcely anything else. The species found oftener in their stomachs was the alewife. Among others seen were various minnows, young yellow perch and young suckers. No young whitefish, trout or lake herring were seen in their stomachs.'

The exclusion from the scheme of Canadian fish-culture, as carried on under Dominion auspices, of the more typically predaceous species is well justified. Parties in various provinces have become impatient of this strict limitation, and in the press and otherwise, have pointed to the extreme variety of fish hatched in the establishments of the United States and other countries. But it is better to be wise in time. Even in well-protected and carefully supervised waters, like the sporting lakes and rivers in England and Scotland, the coarse predaceous fish may gain the upper hand and be reduced with difficulty. During the early months of the year 1900 the waters of the Earn, in Perthshire, Scotland, were overrun by pike, the local journals in April announcing that "the ravages of pike on trout and young salmon in the Earn have become so great, that the river watchers have had instructions to net as many of the voracious marauders as possible."

In the true interests of fish-culture, destructive measures are as necessary as those of propagation and rearing. The 'wolves' must be destroyed, that the valuable lambs may have a fair chance. Ill-weeds, the old proverb declares, grow apace, and as a rule the coarse inferior fish are able to look well after themselves, too well, the fish-culturists often thinks, when he realizes the difficulty of diminishing or of wholly clearing them

out. Exceptionally, some of these fish may be tolerated. As the Iowa Fish Commission in their Eighth Biennial Report said: 'Some of our native fishes are of so exceedingly voracious habits that they are, or have been, condemned as unfit to plant in any waters, but we have many shallow mud lakes that are totally unfitted for the better grades, and the voracious pickerel and yellow perch are perfectly at home in them. They furnish much pleasure, and a very palatable addition to the bill of fare for the people, and such waters should be kept well stocked with them.'

Artificial fish propagation if intelligently carried on takes account not only of the very different conditions which various waters provide; but also of the very different needs of the localities to be stocked. Fish, like the yellow perch, which are detested in some waters, are regarded in others as desirable fish for angling purposes. The following remarks of the late Mr. A. N. Cheney, illustrate the difficulties experienced by the Forest, Fish and Game Commission of New York, in dealing with applications for supplies of brook trout-fry. He said:—

'It is generally understood that when a person desires to obtain fish for planting from the Forest, Fish and Game Commission of New York, particularly if the fish wanted are trout, an application must be made out, filling in answers to certain questions, one of which is to declare whether or not the water is natural trout water, and another is to state the kinds of fish, other than trout, that are in the water in which it is desired that the trout be planted.

'More and more, apparently, the answer to the last mentioned question is 'pickerel' . . . . . the pike commonly called pickerel. Brook-trout and pickerel do not, as a rule, thrive in the same water, aside from the fact that pickerel will prey upon trout, but occasionally pickerel will make their way into and establish themselves in the cool waters natural to trout, and generally the commission declines to furnish trout to be planted in waters that pickerel have invaded and become a fixture. One man wrote that to reject trout applications for waters that contained pickerel 'would be to remove the greater part of the streams in that region from the list of trout streams'. Another applicant who had declared that pickerel were found in the stream for which he wished the trout mentioned in his application, made a personal call upon the commission after his application had been rejected, and argued that he should have the trout he asked for because he had been frank enough to admit that the stream contained once in a while a small pickerel, for he thought no one else would have made the admission. He was somewhat surprised when there was shown to him a report made by one of the state game protectors that the stream was unsuitable for trout, not only because it contained pickerel, but because it was used by a large village as the outlet for its sewage. In one week two men asked for trout to be planted in waters infested with pike, or pickerel, rock bass, sunfish and yellow perch, and both admitted when questioned that the water was not suitable for trout, but they thought if trout were planted this act would stop winter fishing through the ice under Section 58 of the game law, and they were inclined to be indignant because their applications were rejected. One man thought if large trout were planted they could protect themselves from the pickerel. The Commission tries to inform itself about any water in which there is the least doubt as to its fitness for members of the salmon family, and so when the applicant's answers to the queries in the application are not conclusive, the state game protector of the district in which the water is situated is asked to report on it. There are plenty of streams and ponds that have been improperly planted with fish, and in some instances there is a remedy for the mistake and in others not. If there is a remedy the applicant generally wishes the state to apply it, for it means an expenditure of time and money. It is much easier to put fish into a pond or stream than it is to get them out after it is discovered that the putting of them in is a blunder.

'Again and again I have advised correspondents to remove pickerel from trout waters and try and restore it to its original condition instead of putting in other fish, generally black bass, that cannot be removed.

A word regarding the sturgeon must conclude this hasty sketch of a large and complicated subject. There is a universal opinion amongst fishermen that the sturgeon is an undesirable predaceous fish. The grounds for this opinion are far from satisfactory. Indeed, the evidence at present available points the other way, as the stomachs of



sturgeon examined by myself, and some foreign authorities were distended with food of the most innocent kind, mostly shell-fish, insects, and small food; but no spawn of young fry. The International Commissioners in the report from which I have already made several quotations, do not regard the opinion, that it is a destroyer of other fish, as very conclusive, and they speak upon the subject in the following terms respecting Lake Erie sturgeon:—

‘Originally one of the most common fishes of the lake, the sturgeon has suffered relatively more depletion than any other. It was formerly a very prominent feature of the pound-net catch, especially before its value had been recognized, and while its capture was regarded as a nuisance. The fishermen at that time destroyed it in immense quantities, and when a market had been found the supply was already much reduced. It has continued to be taken by the pound-nets and has also been made the object of a special fishery by means of gill-nets, hooks and lines and seines.

The species is at present most abundant at the extreme eastern end of the lake, and elsewhere more plentiful along the northern than the southern shore. The principal cause of decrease, and the one which has been longest in operation has been the pound-net fishery, but the statistics show a continued and heavy diminution in the supply where gill-nets and hooks alone are now employed. The sturgeon is classed among predaceous fishes by many fishermen, but in what degree it merits this distinction we have been unable to decide. In the absence of more conclusive evidence as to the extent of its destructiveness, and for the reasons stated in connection with the wall-eyed pike, we regard the species as deserving of such protection as can be granted it without detriment to the more important branches of the lake fishery. Its size and hardness permit of the return to the water alive of all immature individuals which may be taken by any method, and much good can undoubtedly be accomplished by this means, as a large proportion of the pound-net catch especially consists of the small fish. It is important, furthermore, that the extent of the special fisheries for the species should be materially reduced.’

The sturgeon might fairly claim a place in any scheme of intelligent scientific fish-culture, were it not that certain practical difficulties beset the procuring, fertilising, and handling of the eggs in hatcheries. The small jelly-like embryo sturgeon, which hatch out in 5 or 6 days, are most difficult to plant, and, until some special incubating and distributing apparatus is devised, the sturgeon cannot be brought to a condition, that is an age, which will admit of their safe and successful transportation from the hatching tanks to the waters to be stocked. In view therefore of the prevalent opinion that sturgeon are unusually destructive, so far as the spawn of whitefish, is concerned, and considering that the obstacles to their successful propagation artificially on a large scale appears at present not very practicable, it seems desirable to rely on the natural propagation of these fish and afford them reasonable protection by means of close times, size or weight limits, and legal means of capture, rather than allow the sturgeon to be depleted in the hope that artificial hatching will maintain the abundance of this increasingly valuable fish.

To summarize the contents of the preceding pages it may be briefly said:—

- (1) Trout should not be encouraged in salmon rivers.
- (2) Black Bass are most undesirable where trout and grayling exist, and should be introduced only into isolated waters, where they cannot spread and migrate.
- (3) Pacific species are not desirable in eastern waters.
- (4) Maskinonge, pike, pickerel and perch can coexist in the same waters.
- (5) Whitefish as an element of food, as a rule, are more valuable than sporting fish in Western Canada.
- (6) Predaceous fish should be planted only where minnows and other food are abundant.
- (7) The greatest care and caution should in cases be exercised in the planting of predaceous species.

## No. III.—THE AIM AND METHOD OF FISHERY LEGISLATION.

By PROFESSOR EDWARD E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

A special report which I published in the Departmental (Fisheries) Blue Book in 1899, fully explaining the object of legislative enactments relating to close seasons for fish, afforded, I have reason to know, information which a great many interested persons had sought for in vain. The subject is one very commonly misunderstood, if, indeed, it is generally known at all. Sir Frederick Pollock, the famous English jurist, has said of fishery laws, as a whole, that their very existence is hardly known except to the parties interested in their subject matter; yet, he added 'they are of considerable extent and intricacy, and may raise important questions of general legislative policy. Thus it is evident that in the case of the fishery laws, the question of interference with private discretion by the authority of the state has constantly to be decided one way or the other. In dealing with fresh-water fisheries the tendency of modern law making has been to impose new restrictions; in dealing with sea fisheries to remove old ones.'\*

In the report, above referred to, I pointed out the very diverse reasons, which led to the framing of the different existing close seasons for fish of economic importance in the Dominion, and numerous letters, addressed to the department, or to me personally, show that my attempt had furnished precisely the kind of information that was desired.

The aims and objects of all effective fishery legislation, apart from what is called International law, may be summarized under three or four heads: but the methods by which such aims and objects are achieved are complicated and various. The method of fishery legislation has been moulded into such diverse forms that the body of enactments in Canada, as in other countries, is cumbersome and complicated in the extreme. The Canadian code of fishery laws and regulations is the result of gradual growth and accretion through a period of many years, and its various provisions exhibit much overlapping and inconsistency, if not absolute self-contradiction in some cases.

In various parts of the Dominion there is a common impression, though a grossly mistaken one, that fishery regulations are merely a means of securing revenue to the government, and are essentially a method of ensuring a form of indirect taxation. Much of the irritation and resentment at fishery regulation aroused amongst the fishing population may be traced to this erroneous idea. They say 'why should our vocation, our means of livelihood be taxed, and others go free?' Certainly fishery regulations affect the fisherman's vocation, and the imposition of license fees, the infliction of fines and penalties, and other subsidiary accompaniments to legal processes, bring to the public treasury, pecuniary contributions which are added of course, to the public revenue. Fishermen are led from this circumstance to regard fishery laws as a somewhat covert method of compelling them to pay additional tribute to the state; and government commissions, conducting inquiries into fishery matters, encounter no obstacle greater than the unwillingness of fishermen to help, as they think, in formulating new and oppressive enactments, and the exaction of further license fees and taxes. Fishermen shrink from freely and fully telling the facts, through fear that further and perhaps more stringent legal burdens may be laid upon them. The complaint, on examination, is found to be a very mistaken one, and one very far from just, so far as the Dominion government is concerned. It is noteworthy that the government of Canada, during the long period of over thirty years, following confederation, during which period it exercised the predominant power of issuing leases and licenses, of collecting fees, and of enforcing preservative and protective regulations, never regarded the fishing industries as fit subject for taxation. All revenue resulting was ancillary and incidental. The federal government has consistently disowned the desire to 'make money' out of the fisheries, during the years when very high authorities held that the Dominion alone had the right of property and jurisdiction in regard to fisheries. It has adhered to the same view since the announcement of the

\* This applies less to Canada than to other countries.



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Fisheries Judgment by the Judicial Committee of the Privy Council, London, in June 1898, when the 'property' was declared to be, on the whole, vested in the provinces, and the 'jurisdiction' in the Dominion. Oddly enough, the very power which the federal government has always shrunk from exercising is the very power which the above Judgment pronounced to be the peculiar right of the Dominion, viz: the power of imposing a tax by way of license as a condition of the right to fish. The provinces (excepting Manitoba, the North-west Territories, and the District of Yukon) have the power to issue licenses and exclusive fishing privileges. Yet, it is precisely this right of imposing a tax for revenue which the Dominion government never exercised, and most studiously refrained from exercising. Province after province might be named in which the total amount of Dominion license fees fell short, very far short, of the amount expended upon administration and on conservation of the fisheries in the public interest. License fees were in most cases nominal, and were imposed merely to give effectiveness and force to a system of judicious control. An exceptional province, like that of British Columbia, no doubt paid into the Dominion Treasury an annual amount greatly in excess of the expenditure upon the official staff, upon the fisheries, fisheries' cruisers, salmon hatcheries, fish-passes and the like; but such revenue was altogether unsought and unforeseen, and was due to the surprising richness and rapid development of practically a single fishing industry, viz., the salmon industry, which in some respects has no parallel in the world. When the British Columbia fishery regulations were framed the license fees specified were regarded by the canners and fishermen as too moderate. The canners, on more than one occasion, in public petitions and otherwise, as recorded in the Fisheries Department, Ottawa, favoured an increase, and volunteered to levy upon themselves additional taxes or fees in order to further certain desirable objects, such as new fish-hatcheries, &c. At several conferences, chiefly of salmon canners, which I held in Victoria, New Westminster and other British Columbia centres, representative men laid stress on the desirability of levying further assessments upon the canners to promote the fisheries.

It is clear then that, to the principle underlying the policy of the Dominion government, the British Columbia fisheries were no exception; and that regulations, the enforcement of fees and restrictions, were to be carried out in the interest only of the fisheries and of the fishing population, in other words, in the interests of the public. The system of bounty, paid to Atlantic deep-sea fishermen, has been by some parties regarded as proving the disinterestedness of the Dominion government in regard to the imposition of fishery license fees; but it need hardly be pointed out that such a conclusion is inadmissible. The fund which provides the annual amount for the payment of bounty claims is really a sum paid as compensation by the United States, following international arbitration, and usually known as the Halifax Award. The bounty payments are made under authority of an Act passed in 1882, intitled 'An Act to encourage the development of the Sea Fisheries and the building of Fishing vessels.' It must be admitted, however, that the encouragement of any fishing industry by a system of Bounty would not be inconsistent in principle with the policy uniformly followed in Canada. On the contrary, it would be fully in accordance with the spirit and practice of that policy. No doubt individual provinces in the exercise of their rights, defined and decided in the Fisheries Judgment, 1898, have vigorously followed the reverse policy and have already converted the fisheries into a means of considerable revenue. The Dominion government never favoured that view of the matter, and never regarded the fisheries as a source of revenue to be made to yield a maximum annual return, and has scrupulously abstained from imposing upon the provincial licensees the 'tax by way of license fee' for revenue purposes, which the Fisheries Judgment so clearly specified as within the right of the Dominion authorities.

It is interesting to inquire, when entering upon a review of the scope and method of fishery legislation, to inquire why it is that in all civilized countries, fishery regulations have been devised? Why has it been deemed justifiable and necessary to have fishery laws at all? Fishing industries, it must be replied, are really the exploitation by a section of the community of a natural resource, which is the heritage of all. 'It cannot be questioned that the inhabitants of this Dominion' said the late Mr. Justice Gwynne, 'in whatever province they may reside, have an interest in the regulation

\* The reverse, however, could not in any case apply, viz.: the imposition of a provincial fee in addition to a fee for a legally valid Dominion license *Vide*, Privy Council Reports. London No. 8. 1897, p. 23.

and protection of the fisheries, whether they be sea-coast or inland . . . . . and this interest of the public is not the less because in our inland waters, consisting of rivers and lakes teeming with the finest fish, private persons may have property therein.\* Such being the case, the whole country, speaking through the legislature, has the duty and the right to regulate the fisheries, to protect, preserve, and enhance their value and productiveness, as a national resource. The resident on the sea-coast has therefore a voice in deciding whether or not inland waters shall be preserved and rendered more productive, or depleted and destroyed; while the dweller far inland has the right to say whether or not some maritime fishery, be it for lobsters, mackerel, seals or whales, shall be allowed to be destroyed or be properly and effectually protected. It is fortunate that this is so, for, observant and intelligent as fishermen are, their views are often narrow and one-sided, if not wholly mistaken. They rarely combine to foster the common interests of all or to further the industries upon which they as a class depend. The public have an interest in the proper carrying on of the fisheries. As Mr. C. M. Keyes, one of the best known men connected with the Ohio fisheries, said some years ago 'the fish product of the great lakes has become such an important article of food to the vast population tributary thereto, that laws prohibiting unreasonable waste or destruction of this valuable commodity of commerce should be enacted and enforced. The people generally look to commercial fishermen only for their supply of fish food, and are in a way as much interested in making commercial fishing a successful industry as are the men operating the fisheries.'

No doubt the indifference of fishermen generally to the interests of the public, and of their own class as a class, is due to thoughtlessness. A Scottish fisherman, in his evidence before the Royal Commission on Trawling in Great Britain (1884), tersely expressed it, 'in the fisheries,' he said, 'it was always a case of each haul all, and deuce take the hindmost!'

The New York *Fishing Gazette*, February 29, 1896, contained a reference to this important matter of the attitude of the fishermen towards the interests of the state, and the position of the fishing industry in relation to state regulation and restriction, and the following extract, it must be granted, sums up the situation most accurately:—

'This industry should not be hampered by laws based on the fanciful theories of the fish culturist or influenced by the arguments of the fish vandals who operate on the plan that all are fish that come to their nets, but the best interests of the whole public should be considered, and in the end such a system of laws would be to the best interest of the producer and the consumer alike.'

The position of the fisherman is, of course, very unlike that of the ordinary labourer or craftsman and wholly different from that of the trader or manufacturer, hence his views as to the larger national aspects of his industry are often peculiar. Like the hunter's profession, the fisherman's pursuit is full of danger and uncertainty; and the hunter, as is well known, is too often selfish and limited in his views, and will kill deer or other game that should be spared, lest another hunter may secure it. Now, while sea-fisheries may be pursued by any British subject without let or hindrance apart from legislation of a limited local character, or under conventions with foreign powers applicable only to particular waters, the estuaries and fresh-water fisheries are placed in quite a different category. In the tidal parts of navigable rivers fishing is of common right, unless limited or superseded by private right—a very unusual circumstance; but in non-tidal waters the exclusive right to take fish belongs to the owner of the soil. Unless alienated and shown to have been transferred to some grantee, such ownership belongs to the Crown; but in Canada the Crown is represented both by the provinces and the Dominion. As was stated in the Fisheries Judgment, 1898, waters whether vested in the Crown, as represented by the Dominion or as represented by the province in which they are situated, are equally Crown property and the rights of the public in respect of them are precisely the same. For this reason there has arisen some confusion and not a little overlapping in the management of the fisheries; but the decision by the highest tribunal in the empire that the enactment of fishery regulations and restrictions is within the exclusive competence of the Dominion legislature and is not within the

\* Judgment in the Exchequer Court of Canada, *vide* Reports of Queen v. Robertson, Ottawa, 1082.



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legislative powers of the provincial legislatures, sets finally at rest all question as to the authority of the federal government in enacting fishery laws. The legislative supremacy of the federal government in fishery matters continues unimpaired and it is important therefore to point out some of the main characteristics of that legislation.

It is worthy of note that a great deal has been accomplished in the way of fishery regulation and restriction by means of unwritten law. And so long as the Dominion government practically enforced all fishery regulations, very much was achieved by prevention, by moral suasion, by timely warning of more rigorous future action, and especially by attaching conditions to Dominion licenses entailing the cancellation of fishing privileges in case of violation of the regulations. There was a laudable desire, on the part of successive Ministers of the Crown in Ottawa, charged with the administration of the fisheries, not to unduly multiply offences or to make the fishery laws too complicated and exacting. This use of moral leverage, this exertion of indirect pressure through the license system, worked most successfully, and undue harshness, formal legal processes, and an undesirable increase in criminal offences, were avoided. To make every trivial abuse an illegality, and every offending fisherman a criminal, was too serious a measure, and was successfully avoided by the system referred to.

Of course, all fishery laws to be effectual and satisfactory ought to be based upon facts and upon accurate information. Here was an initial obstacle. It was difficult to obtain the desired information from the fishing population, while the rival interests of different classes of fishermen, and of the merchants, buyers, packers or canners, &c., added to the difficulty. Fishery interests had often to be subordinated to commercial and industrial interests. Manufactures were frequently given precedence. A noble river, valuable for its fisheries, might be polluted, blocked by dams and utterly destroyed in the interests of the lumber business or of chemical and other industries. Of course, fishery authorities have often stated that by exercising a little care and caution the fisheries and manufacturing industries could continue side by side. The utilisation of refuse and waste products and the exercise of a little consideration on the part of commercial men would have saved from ruin many a fine river and lake; but, in an age of iron, harsh iron methods often prevail.

From the outline here attempted of existing fishery regulations in Canada any historical review or philosophical discussion of the ultimate ground of fishery laws must be omitted. A sketch of the evolution of fishery laws would be superfluous. As Sir Henry Maine, in his 'Ancient Law' showed, a legal enactment in its present form proves to be, on analysis, not an isolated rule, but the last link in an historical series, the first link in which was probably an arbitrary act of compulsion or an *ex cathedra* dictum. The series of precedents, which have yielded the body of statutes and regulations now in force started in the assumption, or rather the fact, that fishery rights were vested in the Crown. They might be so vested as *patrimonium* and capable of alienation, or as held in trust for the public. Nor was the claim of the Crown limited to rivers and inland waters, or to coastal limits. Just as Spain and Portugal divided the Atlantic Ocean between them under authority of a Papal Bull 1493, so England claimed the North Sea or German Ocean, the Bay of Biscay, the English Channel, and the seas north and west of Ireland, and so late as 1604, the Scottish crown claimed the fisheries for a distance of 14 miles from low-water mark, as is specified in the draft Treaty of Union with England. When private parties or public bodies acquired fishery rights as grantees of the Crown, such rights were exercised under regulations. Thus in Scotland all Salmon fishings are enjoyed by Royal grant: but from the earliest times the holders were required to observe strict conditions imposed in the public interest. As early as 1175, a Statute of William the Lion required engines and traps to be so set as to leave a passage clear in mid-stream for the ascent of the migrating fish to their spawning grounds. The Act is very quaintly expressed, and enjoins that passage in the middle of the stream or river is 'aye to be free sae muckle as a swine of 3 years old well-fed is of length soe that neither the gronzie (snout) nor the tail may win tae ony side.' The statute also shows the antiquity of the observance of Sabbath rest even for salmon in Scotland, for it provides that no fish shall be taken from Saturday evening until sunrise on Monday. Many statutes of a similar nature all directed to restrain certain modes of fishing continued to be passed by Scottish Parliaments down to the date of the Union. The objects of these statutes, according to Lord Westbury, were three in

number—‘One to insure to the salmon a free and unimpeded access to the upper fresh waters which are the natural spawning grounds of the fish. The second to secure the unimpeded return to the sea of the smolt or young fry of the salmon. The third to prohibit the killing of unclean fish.’

In Canada the Crown is represented by both the Dominion and by the Provinces, and much complication has resulted, in consequence, in the interpretation and administration of fishery laws. French seigniorial rights, too, enter into the matter in the Province of Quebec, and in New Brunswick. But apart from these higher and more difficult aspects of fishery law and fishery prerogative, there remains that practical side of fishery legislation, which has directly for its object the protection and preservation of the fisheries as a national resource.

The basis and aim of fishery legislation may be said to be fourfold; or rather four main interests have been prominent in the framing of fishery regulations generally. These are: First,—the interests of the fish. If there were no fish there would be no fishermen and no fishing industries. Hence the preservation and fostering of the fish-supply in their native waters is imperative. Second,—the interests of the fishermen as an industrial community. The body of fishermen have legitimate rights, which must be recognized by the state. The rights of labour cannot and ought not to be ignored, and the fishermen form an important part of the population in most countries. Both on account of their numbers, of the households dependent upon them and on account of other industries involved in and bound up with the fisheries, the fishermen have a recognized claim to consideration. It is hardly necessary to point out that net and twine making, boat-building, barrel and box-making, tin and can factories, ice and salt industries, and the like, depend very largely on the fisheries. Their importance is vast and far-reaching. Third,—the interest of the state as a whole. The interests of the state, or as it is commonly expressed, the public interest, may not always coincide with the first or second interest described above, indeed they may come into serious collision, and many authorities might be quoted to show that the public interest should be paramount and that all the interests should be regarded as of secondary importance. The most patent case to the ordinary citizen is that of mill-owners blocking by dams, or diverting the channels of important rivers for their own private business purposes. The Supreme Court of Iowa, in a case before them two years ago, publicly expressed its view as follows:—‘The streams and lakes are the natural abiding places for the fish. In them they cast their spawn and multiply their species. They constitute an important and valuable article of diet for the rich and the poor, and, with the ways open that nature has provided, they are accessible to both. If the lowest riparian owner of a stream may legally block the way of their migration, the consequences to result to the thousands are readily imaginable. The law that would permit it would be the entering wedge by which the few would profit at the expense of the many.’ Fourth,—International interests, which may affect the comity of nations and which have often reached a stage so crucial and perilous as to override the interests of the fish, the fishermen and the nation, requiring these interests, indeed, to a large extent, to be sacrificed to avoid momentous and lasting evils, such as foreign unfriendliness or even war. The imminent danger of armed conflict has more than once shown that international interests are of supreme significance; but, at the same time, the lesser interests have been frequently insisted on, and opposing international claims and pretensions have been set aside or compromised. The history of international fishery legislation is, indeed, a history of compromises.

In the foregoing summary the interests of the fishermen, or rather of the fishing industries, have been referred to as one, as though it were possible to reduce them to a simple type easily understood, and succinctly stated. But such is not the case. The rival interests of different classes of fishermen furnish those officers, charged with the administration of fishery regulations, with some of their most difficult problems. Fishermen often fall into opposing classes on account of their different methods of fishing. The steam-trawl fishermen on the east coast of Britain and the long line fishermen were long at war with each other; the lobster fishermen of New Brunswick were regarded by the salmon fishermen as a most injurious class, just as the suggested use of salmon traps in British Columbia has been most bitterly opposed by the drift-



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net fishermen of the Straits of Georgia and the Fraser River. It is matter of common knowledge that the sportsmen and anglers are, as a rule, most jealous of the fishermen who use nets and who fish for market; while even such closely related vocations as oyster fishing, and clam fishing, both allied shell-fish industries, have frequently come into conflict. It is less surprising, however, that fish canning and packing industries should be often opposed to the actual fishing industry, as the interests of those who merely handle and put up the products may frequently differ from those who secure the raw product, viz.: the fishermen. Packers and commercial agents may wish to limit the supply owing to the state of distant markets, when the fishermen wish to dispose of large catches; or the prices desired by the fishermen may not appear reasonable or practicable to the merchants.

On the whole, however, these various interests converge, and as the fishermen and the buyers, packers or merchants, are mutually indispensable, the fisheries to be carried on successfully, require the united efforts of all concerned.

I have stated that fishery laws may be grouped in four categories, corresponding to the four great interests mentioned in the preceding pages. These, in a more detailed manner, may be divided into ten separate divisions as set forth below.

(1.) Laws designed directly to preserve and protect fish. They may be subdivided as follows:—

(a.) Close times enforced for a few hours only daily, or on a certain series of days, like the regulation regarding dipping for gaspereaux or alewives in Nova Scotia streams.

(b.) Weekly close times of 24, 36 or more hours weekly and known as Sunday close times devised to secure the safe passage up-stream of part of each ascending school of fish, especially salmon, to the spawning grounds. Most salmon authorities hold that if a few breeding fish of each salmon school be allowed to pass up, including the earlier and later schools, a river may be kept in good productive condition. The Tweed Salmon Commission, Scotland (1896) laid stress on that fact. Such a weekly close time covering 42 hours in the salmon rivers of British Columbia is frequently rendered ineffective by the netters, who on Monday morning go as far up the river as the law allows and overtake the fish which passed up during the prohibited hours of the day before (Sunday).

(c.) A short close season such as was tried for some years in British Columbia covering three or four weeks during the later run of salmon, with the object of ensuring the safe ascent of a sufficient number of fish. These fish belonged to the early schools of coho or silver salmon (until recently of no great economic importance) and the late run of sockeye or blue-back salmon, which in many cases are not suitable for canning being soft, ripe for spawning, and in poor condition for market purposes.

(d.) The definition of a minimum size limit, below which none of the kinds of fish named can be taken, is another effective protective device. It aims to protect immature and undersized fish until they breed. Thus lobsters are stated not to breed until 9 inches long—hence a 9 inch size limit has been enforced.

(e.) A size limit may be enforced on other grounds, as for instance the 10 inch lobster limit in a portion of the Bay of Fundy. The remunerative markets of Boston, U.S., would not accept lobsters under 10 inches in length, hence certain Canadian fishermen urged that this limit be specified in our laws and such a law was in certain waters carried out. The size limits for trout, black bass, and many other fish have been specified in the general interests of the fishery or in some cases, of sport.

(f.) Mesh of net regulations aiming at the same object, viz.: the liberation of small useless immature fish.

(g.) A specified distance between the slats in lobster traps or a special mesh in leaders of trap-pounds, to favour the capture, only of sizeable fish; or the naming of a minimum diameter and length as in the case of oysters in order to secure that those undersized shall not be taken.

(h.) Prohibitions enforced which forbid the taking of fish spawn, the catching, killing, or even possession, of fry and small sized fish, 'the young of any of the fish mentioned in this Act' as it is expressed in the Canadian Fisheries Act, chap. 95, A.D. 1886. While aiming to prevent the destruction of useless small fish, it also forbids practically the stocking of new waters with small fry, which might, indeed, be



a serious injury to such waters unless sanctioned by qualified experts. Fish and fish spawn may be taken for stocking or for scientific purposes if sanctioned by the Minister of Marine and Fisheries in Canada.

(i.) Reserves or special areas of water may be set apart for encouraging the propagation of fish and thus maintaining or improving the supply of fish. Forty or fifty specially reserved rivers, lakes and other waters, are specified in an Order in Council dated August 2nd, 1889, under Section 21 of the Fisheries Act, Chapter 95. Herring spawning reserves have been defined by special regulation off Grand Manan, in New Brunswick. In certain bays and inshore areas in Scotland, beam trawling has been forbidden, in order to preserve spawning grounds and nurseries for small fish, and other measures of this kind have been adopted in connection with different fishing methods (oyster dredges, &c.).

(j.) Improvement of fisheries and the increase of desirable fish is often sought by the withdrawal of protection of voracious species during the spawning time or the curtailment of their close season. Salmon-trout or lake-trout are thus kept in check by a close time not covering the whole period, and pike, while protected by a close season in spring in the North-west Territories, are afforded no such protection in Ontario and the eastern provinces of Canada, where they are of inferior quality and value.

(2.) Control of the fisheries, which is admittedly wise and in the public interest, is achieved in various ways such as,—

(a.) Licenses, leases and permits involving more or less exacting conditions in the exercise of the privileges conveyed.

(b.) Licenses or other permits granted with limitations so as to exclude foreigners, or prevent overcrowding or use for speculative and similar purposes. Sites or fishing locations which are undesirable and useless may be applied for to give the holder a claim after a while to some other better location which would not at first have been granted. The limitation may involve refusal to allow nets or fishing gear at particularly favourable and destructive spots, such as a projecting point at the mouth of a salmon river.

(3.) Prohibitions embracing times, places, &c., such prohibitions being,—

(a.) Restorative, as in the sturgeon fishery of the St. John River, New Brunswick, and extending over a number of years, deemed sufficient by the authorities to restore the depleted sturgeon supply. Striped bass in the Miramichi River were similarly protected, and with complete success, as was proved at the end of the third year.

(b.) Preventive, as in the forbidding of non-tidal salmon nets in rivers; cod-trawls or bultows, which are long lines of baited hooks on snoods, and laid along the bottom, and objectionable because of their alleged destructive effects upon breeding fish, and similar prohibitions of general application.

(c.) Local prohibitions specially applicable to particular localities and districts *e.g.* pound and trap prohibitions in Manitoba and in Georgian Bay, Ontario, or the prohibition, for many seasons, of seines in Ontario, or of oyster dredges in Richmond Bay, Prince Edward Island. Salmon are not to be taken ascending a pass, a leap or in a breeding pool.

(d.) Universal prohibitions of nefarious and injurious methods, &c., which covers the use of dynamite and explosives generally, also submerged trap-nets, fish spears, and purse seines; all of which methods while effective, are too destructive to be regarded as fair and legitimate means of capture.

(e.) Special prohibitions such as that prohibiting the taking and handling of salmon spawn; but not that of trout or any other fish: a prohibition based no doubt upon the sentiment prevailing in old countries that salmon are entitled to more protection than other fish. A peculiar regulation—special even among 'Special' regulations, is that occurring in the Canadian Lobster Regulations passed in 1899, which enjoins that no one shall buy or sell mutilated lobsters or broken lobster meat. The object is to prevent evasion of the lobster size-limit regulations, it being impossible for fishery officers to detect violations if fishermen could handle wilfully broken or mutilated lobsters.

The serious nature of this nefarious procedure is being felt in the Eastern States, and the following, taken from the N.Y., *Fishing Gazette* :—

A lobster pirate is making a good revenue in the waters of the Maine by buying short lobsters at 2 cents each from the fishermen and boiling them on a steam launch

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which he has fitted up with a boiler. He breaks the tails and claws from the lobsters and has nothing to fear from the fish and game wardens, for there is no evidence to convict him. He can handle 800 pounds of meat per day, which he sells in Boston, obtaining good prices from the hotels and restaurants. He contemplates buying three more launches this summer.

(4.) Prevention of waste in the fisheries which is dealt with in many regulations such as the following:—

(a.) The capture of fish for conversion into manure is prohibited. Of course there are cases in which captured fish can be turned to no other use, especially if kept too long, and some fish like the schools of dying alewives in the great lakes are most readily utilised for oil and for fertilizers, a use still more justifiable in the case of dog-fish and other inedible species: but in many such cases 'lawful excuse' may be pleaded and would be accepted by the officers of the law.

(b.) Fishing through the ice for trout and for oysters, &c., is forbidden, not because the spawning time is in winter or because the fish are not in good condition, but because of the waste and the abuse which such fishing encourages. Many trout waters in past times were depleted by winter fishing through the ice, and in the case of oysters it seems to be impossible to avoid serious destruction of spat and small oysters, which perish, when the 'haul' is dumped upon the ice; but such abuses are less likely to occur in summer fishing.

(c.) Grates are required in some provinces at the intake of irrigation ditches to prevent the ascent of small fish from rivers and lakes.

(d.) Bare unbaited hooks or trawls for sturgeon are prohibited in order to prevent the impaling and loss of spawning female fish, which may release themselves after being severely injured and as a rule die and are wasted.

(5.) Over-fishing (either by the method of fishing or the character of the tackle) it is sought to prevent in various ways: (a.) Limitation of length of net and number, or by specifying the number of hooks allowed on a long line, &c.

(b.) Providing for an adequate distance between nets, traps, weirs, and fixed, or moving, nets generally.

(c.) Steam tugs are in some cases forbidden to engage in actual fishing operations, and may convey crews, boats and gear, or carry the takes; but not actually fish in such cases.

(d.) Limitation of the amount of catch or quantity to be legally shipped. This specially applies to game fish and like the laws against pot-hunting for game, has force chiefly against undesirable intruders from the United States, not true and legitimate sportsmen.

(6.) Laws to facilitate the migrations of fish to and from their feeding and breeding grounds have been enacted on the following lines:—

(a.) Obstruction to the ascent of fish to spawning resorts are forbidden.

(b.) Character and length of leaders to traps, fixed nets, &c., are defined by law. Snelt bag-nets for example have been found to have very long leaders of brush or wickerwork which render these nets too destructive.

(c.) The main channels of rivers may not be obstructed and no net shall extend more than one third of the breadth of such river course.

(d.) Fishways must be provided at dams, &c., if judged to be necessary by the authorities. The cost to be borne by the owner, unless the Minister of Marine and Fisheries consents that half be paid.

(7.) Protection of interests of fishermen and parties concerned in the fisheries is sought by special regulations.

(a.) Certain nets and modes of capture may be prohibited in the interest of those established in the industry. Thus in the Bay of Quinte, gill-nets in summer are not allowed because the nets easily rot when used there, and while a few men would use them, the majority in their own interest do not desire to do so. So also in the British-Columbia fisheries, trap or pound-nets have in general been forbidden because the great body of fishermen depended upon gill or drift-nets.

(b.) Salmon canners in British Columbia though not actually fishermen were granted a specified number of licenses, at first 40, then 25 or 20, and lastly 10 licenses, the purpose being to secure the canner from hasty or injurious action by the fishermen, who



might refuse to fish, and put the canner in serious difficulty at the height of the season. There is of course no necessary connection between the canning of a product such as salmon, and the capture of the fish by fishing. In some remote districts, where reliance must be placed upon Indians, unless the canner had licenses granted to him, he might not be able to operate at all. Yet a canner is not a fisherman any more than a tailor is a farmer, although woollen cloth necessitates the production of wool on the farm. In view of the canner's vested interest (his capital and outfit) he has by law been considered as entitled to fishing privileges.

(c.) In order to meet fish-buyers' needs and trade requirements, regulations have been modified as in the case of the Sunday close time which is really a Saturday close time on Lake Winnipeg for special trade reasons, and in British-Columbia the Sunday close time ends at 6 p.m., not midnight, for the benefit of the canneries.\*

(d.) Similarly, regulations exist compelling one class of fishermen to desist from fishing at a specified time in order to meet the desires of another class. In southern New Brunswick certain nets in the sea, it has been urged, should by law be required to be taken up at daylight to meet the wishes of other men in the locality.

(8.) Regulations of the nature of precautions form a distinct group by themselves. The possession of illegal nets and apparatus would be a most effective measure in this direction; but being difficult to justify, is still *in futuro*: but the following are noted:—

(a.) Fishing in the mouths of rivers with seines is forbidden, and a specified distance is named in the regulations with reference to that.

(b.) Near salmon nets other apparatus, such as lobster traps, must not be set, on the ground that the fish would be deterred from entering the nets, and the hauling of the lobster traps would drive the salmon away.

(c.) Preparing to fish, like loitering or suspicious conduct under the Criminal Code, may be criminal under the fishery laws. Such precautionary measures prevents fishing operations before the opening of the legal time, or renders it impossible for one party to monopolise another's ground by taking possession prematurely and preparing to set fishing apparatus.

(d.) The presence of dynamite or explosives on board fishing vessels for the purpose of killing fish is unlawful in accordance with a recent regulation (April 12th, 1902) of a rather exceptional character.

(9.) Injurious influences affecting fish-life and closely bound up with sanitary questions, have formed the subject of much fishery legislation. Existing regulations have been framed on two lines:—

(a.) As pollutions injuriously affect fish, fish-life and eggs upon spawning grounds.

(b.) As pollutions annoy and deter migrating fish, especially when entering or passing up rivers. An offal prohibition in the Gulf of St. Lawrence was based on the alleged disappearance of the schools of cod from certain localities in Labrador on account of the offensive floating gurry or putrefying fish-waste in the water. In the Fraser River the offal from the canneries has also been regarded as harmful and therefore forbidden by law.

(10.) Regulations aiming to secure quality and purity in manufactured or prepared fish-products are included under fishery laws, though strictly speaking they belong to trade and commercial legislation.

(a.) Branding of packages and barrels with an official stamp, after strict examination and approval, has proved most effective in Scottish cured herring. The brand has given them the status they hold, as perhaps the finest quality in the markets and for trade purposes divided into several recognized grades.

(b.) Stamps on cases or cans specifying the legality of the time and season when packed. Thus Canadian lobsters, if not bearing, outside the wooden case, a tinted stamp, are thereby recognized as unseasonable and in most cases as illegal goods.

(c.) Certain customs regulations practically coincide with the objects of some fishery laws, as in the case of United States, States' salmon imported free of duty by a special concession, into British Columbia, the main consideration against such concession being that the fish, as a rule, were in bad condition, often wholly unfit to can, on account of the circum-

\* The salmon must be caught before daylight in order to be available for canning operations, when the packing hands are ready on Monday morning.



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stances of capture and transit. In the crowded United States trap-nets the fish are often terribly crushed and mutilated, and after being dumped into a huge scow may lie exposed for hours to the heat of the sun in July or August, and at the close of the more or less lengthy trip, from the net to the cannery, they have wholly deteriorated, and, it is alleged, may be in a state of semi-putrefaction. No doubt canners of fish are frequently careless as to the quality of their goods, and the employees indifferent as to the excellence and appearance of the commodities they pack; but this is not always so. Many firms have a constant and strong desire to establish and to keep up a good reputation, and some go so far as to insist that the government shall step in and insist on a certain standard of quality in the fish products marketed. Five or six years ago a prominent man in the fishing industries of Lake Erie, on the United States side, came forward and strongly advocated this view. He claimed that:—‘Our law-making bodies, should pass laws that will not only foster and increase this great industry, but will also compel dealers and shippers to produce and send to the consumer, wherever he may be located, this valuable food product in the most perfect and wholesome condition possible. The people have a right to this protection and should enforce their just demands through the medium of their respective legislators.’

Some B. C. canners in 1878 volunteered to tax themselves to raise \$7,500 per annum to promote the fisheries in addition to the usual license fees, and, later favoured a Government Brand or Stamp on packages of Fraser River fish.

The sardine industry of Maine, the lobster canning industry in certain Canadian Provinces, the herring trade of the Dominion, as a whole, has suffered from the indifference of fishermen and packers respecting the quality of the products sent into the market.

Ten years ago I reported on the quality of the dried cod shipped by certain Nova Scotia firms to the United States, and I pointed out that whereas our cod realised only \$7 per quintal, the Norwegian dried cod prepared more carefully and intelligently brought as much as \$12 per quintal. Canadian cod being, however, of a higher standard than that prepared by the United States curers generally, the products of the latter rarely realising more than \$4.50 per quintal. The less fishery regulations however trench upon matters purely of trade and commerce the more they fulfil their original purpose, the protect on of fish as a great natural resource of the country. Regulations such as the provincial prohibition, forbidding trespass upon premises and waters leased for purposes of fishery\*, are open to criticism, as advancing beyond the proper limits of fishery legislation. Even offences against the fishery regulations forbidding the pollution of rivers and lakes may often be more effectively and appropriately dealt with by local health authorities under the Public Health and Sanitary laws.

It is not the purpose of this sketch to invade the somewhat controversial and perilous field of international law as affecting fisheries. The above summary aims, rather, to outline the main types of fishery regulations as illustrated in our Canadian laws, accompanied by a brief suggestion as to their *rational* and basis; but it does not in any way profess to be exhaustive.

If such an outline brings out the main features of existing legislation, and if it removes any misconceptions regarding its aim and purpose rather than its form or literal expression, the object in view has been fully accomplished. It will be apparent that the ten main groups of regulations roughly tabulated, and the forty-two subdivisions into which they fall, cover the four main objects of all fishery laws:—the interests of the fish, the fishermen, the state, and of foreigners with which we have relations on fishery matters. These four objects embrace the essential aim of all fishery legislation; but its method is very diversiform, as has been indicated. The tendency has been to multiply the detailed forms of fishery regulation chiefly in response to supposed local peculiarities and special conditions of the fishermen or the fish. The bane of fishery regulation is complication and diversity in local detail.

There is no course, in the long run, more wise and more beneficial than a resolute opposition to hasty, ill-considered and facile multiplication of detailed fishery regulations. If carried to excess it nullifies regulation altogether, for no laws can be enforced, which apply only in restricted areas, or for petty reasons. If a fish for example can be

\* Rev. Statutes of Ontario c. 32, s. 26.

legally caught in one area at the same time that it is prohibited in the next area, poaching will go on all the time, and any illegal fish detected in one district will be declared to have been taken in the other district. Fishery laws, the fewer and simpler they are, will be all the more effective and beneficial for the reason that they are more easily understood, and that there is less excuse for wilful violation. Canadian fishery legislation is all based on the Fisheries Act, Chapter 95 (1886) which consists of 22 sections and 68 subsections. Under the British North America Act it was held that the Canadian Parliament had power to enact these Statutory Regulations, though, as already pointed out, certain of the clauses are now declared to be invalid and *ultra vires*. Since the date of the statute, 1886, numerous amendments and additions have been made, at least four new sections (consisting of 22 subsections) have been added, and 5 other subsections appended, while 2 new sections (one embracing 9 subsections) have been substituted for old ones, and 8 old subsections in addition, replaced by new ones. One section of the Act has been repealed totally. Few fishery regulations enacted in recent years are statutory, no less than 309 Orders in Council embodying new fishery regulations have been passed since 1890, such Orders in Council having under section 16 of the Act (1886) the force of the Act itself. The reduction in number and simplifications of this formidable series of legislative enactments is most desirable, but a useful and inclusive body of regulations can only be framed, after deliberate and exhaustive consideration of the fisheries as a whole. Hasty and ill-considered legislation is at once a danger and an injury, as Mr. C. E. Fryer, one of His Majesty's Inspectors of Fisheries, said at the Great Fisheries Conference in London, July 27th, 1883 :—' One of the greatest evils to which any industry can be subject is that of spasmodic legislation—legislation framed to meet a popular cry of the moment. Among a certain class of people whose view is bounded by the horizon of their own particular standpoint, a demand for legislation is heard on every imaginable pretext.'

Fishing laws are too serious in their effects, direct and indirect, upon the fishery resources of the country, the welfare of the fishing population, and the interests of the state to allow of ill-informed, one sided or hasty formulation of regulations and injudicious or blindly rigorous enforcement.

















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